

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN DUPLICATE*
(Other instructions on
reverse side)

5. Lease Designation and Serial No.

U-23161

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

None

8. Farm or Lease Name

Bug

9. Well No.

13

10. Field and Pool, or Wildcat

Development Wildcat

11. Sec., T., R., M., or B.L. and Survey or Area

S.17, T.36S., R.26E.

12. County or Parrish 13. State

San Juan

Utah

1a. Type of Work

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. Type of Well

Oil Well ☒Gas Well ☐

Other

Single Zone ☐Multiple Zone ☐

2. Name of Operator

Wexpro Company

3. Address of Operator

P.O. Box 1129, Rock Springs, Wyoming 82901

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface

NE 1/4 NW 1/4 S.17, T.36S., R.26E., 699' FNL, 1998' FWL

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office*

12 miles southwest of Dove Creek, Colorado

15. Distance from proposed*

699'

16. No. of acres in lease

640

17. No. of acres assigned to this well

(Also to nearest drlg. line, if any)

18. Distance from proposed location* May #2 Bug Well, to nearest well, drilling, completed, or applied for, on this lease, ft.

TD 6384' NE SW S.7,

19. Proposed depth

6030'

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, or GR.)

GR 6250'

22. Approx. date work will start*

Upon Approval

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	9-5/8"	36#	1660'	760 Sks. Reg. G cement w/3% CaCl
8-3/4"	5-1/2"	17#	6030'	To be determined from caliper logs.

Wexpro Company proposes to drill the subject well to a total depth of 6030'.

APPROVED BY THE DIVISION
OF OIL, GAS, AND MINING

DATE: 11-4-80BY: M. J. Minder

RECEIVED

OCT 30 1980

DIVISION OF
OIL, GAS, AND MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed: By W. HaddTitle: Division EngineerDate: 10/24/80

(This space for Federal or State office use)

Permit No.

Approval Date

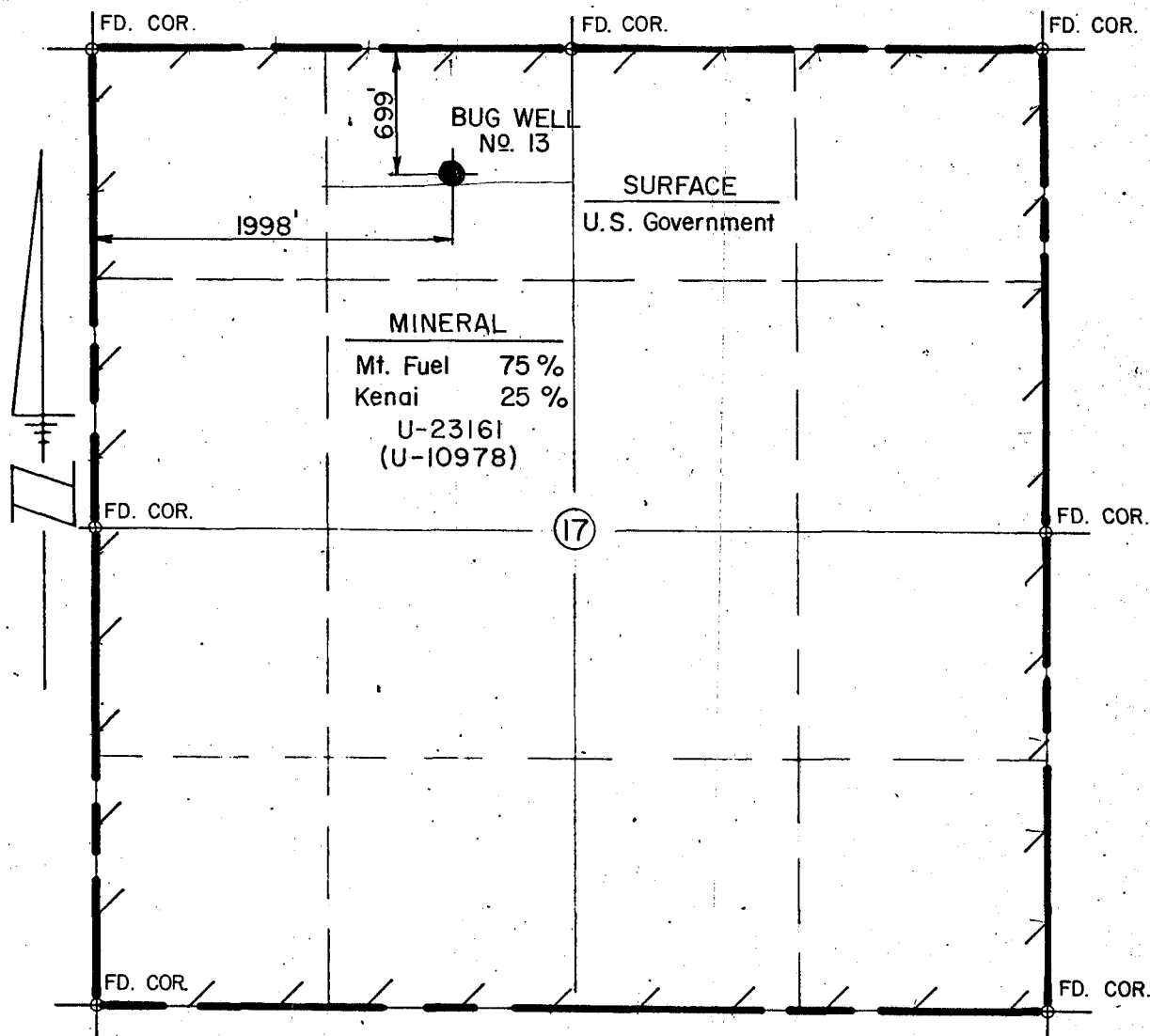
Approved by

Title



Date

Conditions of approval, if any:

T. 36 S., R. 26 E., S. L. B. & M.
San Juan County, Utah






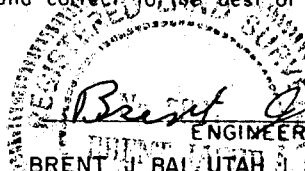
LOCATION PLAN
SCALE 1" = 1000

Surface 
Mineral 

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge.

LEGEND

-  Well
-  Stone Corner
-  Pipe Corner


BRENT J. BAI, UTAH L.S. Registration No. 5031

ENGINEERING RECORD

SURVEYED BY	B & G 9-12-80
REFERENCES	G.L.O. PLAT <input type="checkbox"/> U.S.G.S. QUAD. MAP <input checked="" type="checkbox"/>
LOCATION DATA	
FIELD	Bug
LOCATION: NE 1/4 NW 1/4, Sec. 17, T. 36 S., R. 26 E., S. L. B. & M. 699' FNL, 1998' FWL	
San Juan County, Utah	
WELL ELEVATION: 6260' as graded by electronic vertical angles from Company Bench Mark.	



WEXPRO COMPANY

CERTIFIED WELL LOCATION
AND
WELL SITE PLAN

BUG WELL No. 13

DRAWN: B & G 9-12-80	SCALE: 1" = 1000
CHECKED: CRW BTM	DRWG. NO. M-15549
APPROVED:	1/4

WEXPRO COMPANY
BUG WELL NO. 13
LEASE NO.: U-23161
NE NW SECTION 17, T.36S., R.26E.
SAN JUAN COUNTY, UTAH
10-Point Plan

1. The surface formation is Morrison.
2. Estimated tops of important geological markers are:

Morrision	Surface
Entrada	735'
Carmel	875'
Navajo	925'
Chinle	1585'
Shinarump	2320'
Cutler	2590'
Honaker Trail	4290'
Paradox	4985'
Upper Ismay	5455'
Lower Upper Ismay	5635'
(Base 2nd Shale)	
Lower Ismay Shale	5700'
Lower Ismay Porosity	5820'
"B" Zone	5840'
Desert Creek	5890'
Lower Bench	5930'
Desert Creek Porosity	5940'
Salt	6025'
Total Depth:	6030'

Objective Reservoir: Lower Upper Ismay, 5635'
Desert Creek Porosity, 5940'

Other Possible Producing Zones: Honaker Trail, 4290'
Lower Ismay Porosity, 5820'

3. Estimated depths of anticipated water, oil or gas or other mineral bearing formations expected to be encountered:

No water flows anticipated. Surface casing is designed to protect aquifer in the Navajo sandstone.

Oil or gas expected in Objective Reservoir -- Lower Upper Ismay,, 5635'; Desert Creek Porosity, 5940'. Also, the Honaker Trail, 4290', and the Lower Ismay Porosity, 5820', may be productive.

No mineral bearing formations anticipated.

4. Casing Program:

<u>Proposed</u>	<u>Footage</u>	<u>Size</u>	<u>Grade</u>	<u>Weight</u>	<u>Condition</u>	<u>Thread</u>
Surface	1660'	9-5/8"	K-55	36#	NEW	8rd ST&C
Production	6030'	5-1/2"	K-55	17#	NEW	8rd LT&C

Cement Program:

Surface: 760 sacks of Regular Type "G" cement plus 70% excess cement treated with 5% Dowell D-43A or 3% Calcium Chloride.

Production: Cement volumes and composition to be determined from caliper logs. Cement casing with 50-50 Pozmix "A" cement. Cement to be set 1000' above the uppermost producing zone.

5. Operator's minimum specifications for pressure control equipment requires a 10", 3000 psi annular preventer, and a 10", 3000 psi double gate blowout preventer from the surface to the total depth. See attached diagram. Blowout preventers will be tested by rig equipment after each string of casing is run. All ram-type preventers will have hand wheels installed and operative at the time the preventers are installed.
6. Fresh water with minimum properties from surface to total depth. Spud mud will be used for the surface hole. A mud de-sander will be used from under the surface casing to total depth to remove all undesirable solids from the mud system and to keep the mud weight to a minimum. The mud weight will be brought up to 11.7 ppg before drilling into the Desert Creek zone at 5890'. Mud weight will start to increase at 5700'.

A fully manned logging unit will be used from 4100' to total depth. The contractor will catch 10-foot samples from surface to 4100'.

Sufficient mud materials to maintain mud requirements and to control minor lost circulation and blowout problems will be stored at the well site.

7. Auxiliary equipment will consist of: (1) A manually operated kelly cock; (2) No floats at bit; (3) Mud will be monitored visually from 0' to total depth; and, (4) Full opening Shafer floor valve manually operated.
8. Four drill stem tests:

1) Honaker Trail	4290'
2) Lower Upper Ismay	5635'
3) Lower Ismay Porosity	5820'
4) Desert Creek Porosity	5940'

Cores: 60', Desert Creek Porosity, 5940'

- Mechanical Logs:
1. Dual Induction Lateralog from total depth to surface pipe.
 2. Compensated Neutron-Density Log with caliper and Gamma Ray from total depth to surface pipe. Run Gamma Ray and CNL to surface.
 3. Continuous Dipmeter from total depth to 4030' (minimum run). Run Gamma Ray correlation log with Dipmeter.

During drill stem testing or when a completion rig is completing a well, some flaring of natural gases or produced gases will be necessary.

Wexpro Company
Bug Well No. 13
Lease No. U-23161
NE NW S.17, T.36S., R.26E.
San Juan County, Utah
10-Point Plan

Page Three

9. No abnormal temperatures or Hydrogen Sulfide is anticipated. No abnormal pressures anticipated except the Desert Creek Porosity at 5940'. The pressure will be controlled with a mud weight of 11.7 ppg before drilling into the Desert Creek Porosity zone.
10. The anticipated spud date is upon approval from the State of Utah and the U. S. Geological Survey. Duration of drilling will be approximately 25 days with 2 days completion.

CHECKLIST 3000 PSI EQUIPMENT

Checklist and equipment list for 3000 psi blowout prevention equipment

STANDARD ITEM REQUIREMENTS

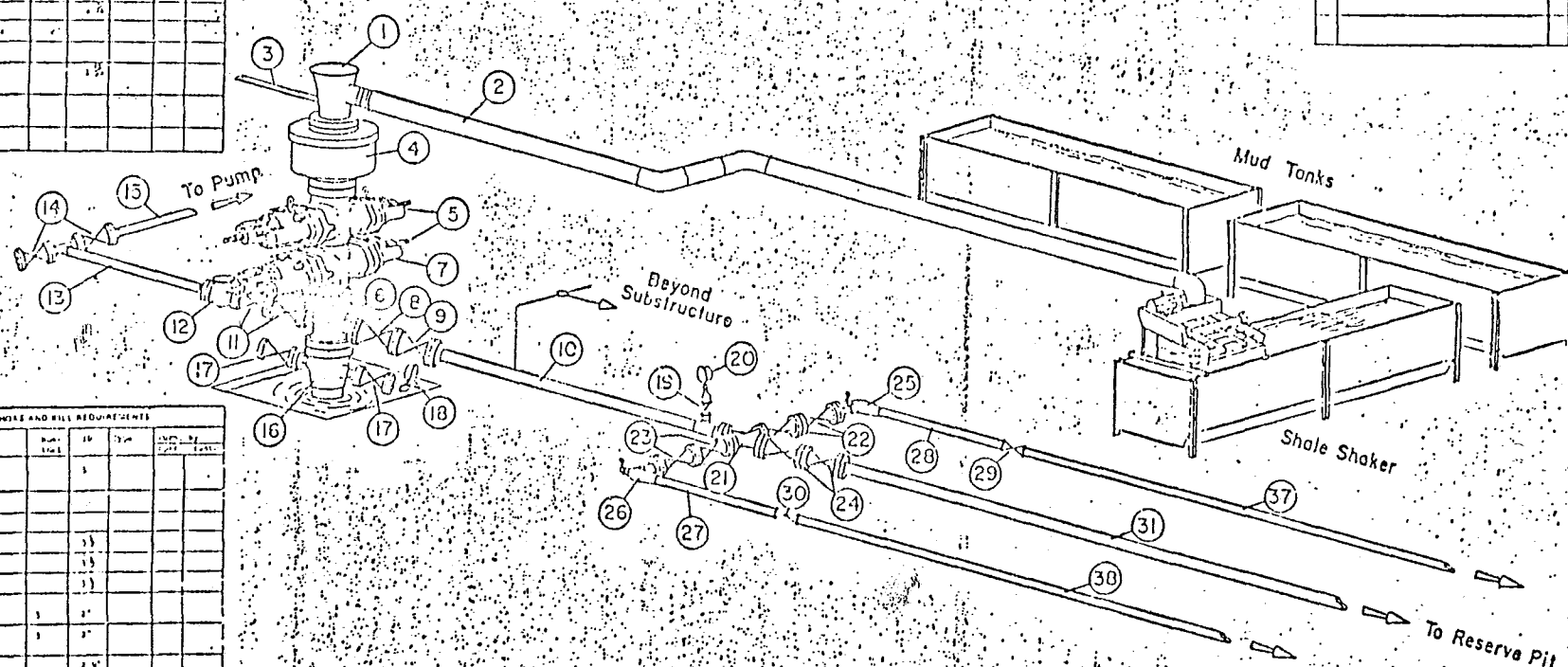
No.	Item	Qty.	Unit	Size	Notes
1	Drilling Rig				
2	Drilling Pipe				
3	Drilling Bit				
4	Drilling Mud				
5	Drilling Mud Pump				
6	Drilling Mud Tank				
7	Drilling Mud Separator				
8	Drilling Mud Filter				
9	Drilling Mud Shaker				
10	Drilling Mud Storage				
11	Drilling Mud Transport				
12	Drilling Mud Disposal				
13	Drilling Mud Recycling				
14	Drilling Mud Reuse				
15	Drilling Mud Storage				
16	Drilling Mud Transport				
17	Drilling Mud Disposal				
18	Drilling Mud Recycling				
19	Drilling Mud Reuse				
20	Drilling Mud Storage				
21	Drilling Mud Transport				
22	Drilling Mud Disposal				
23	Drilling Mud Recycling				
24	Drilling Mud Reuse				
25	Drilling Mud Storage				
26	Drilling Mud Transport				
27	Drilling Mud Disposal				
28	Drilling Mud Recycling				
29	Drilling Mud Reuse				
30	Drilling Mud Storage				
31	Drilling Mud Transport				
32	Drilling Mud Disposal				
33	Drilling Mud Recycling				
34	Drilling Mud Reuse				
35	Drilling Mud Storage				
36	Drilling Mud Transport				
37	Drilling Mud Disposal				
38	Drilling Mud Recycling				
39	Drilling Mud Reuse				
40	Drilling Mud Storage				

MOUNTAIN FUEL SUPPLY COMPANY

3000 psi BLOWOUT PREVENTION EQUIPMENT

SPECIAL CHASE AND RIG REQUIREMENTS

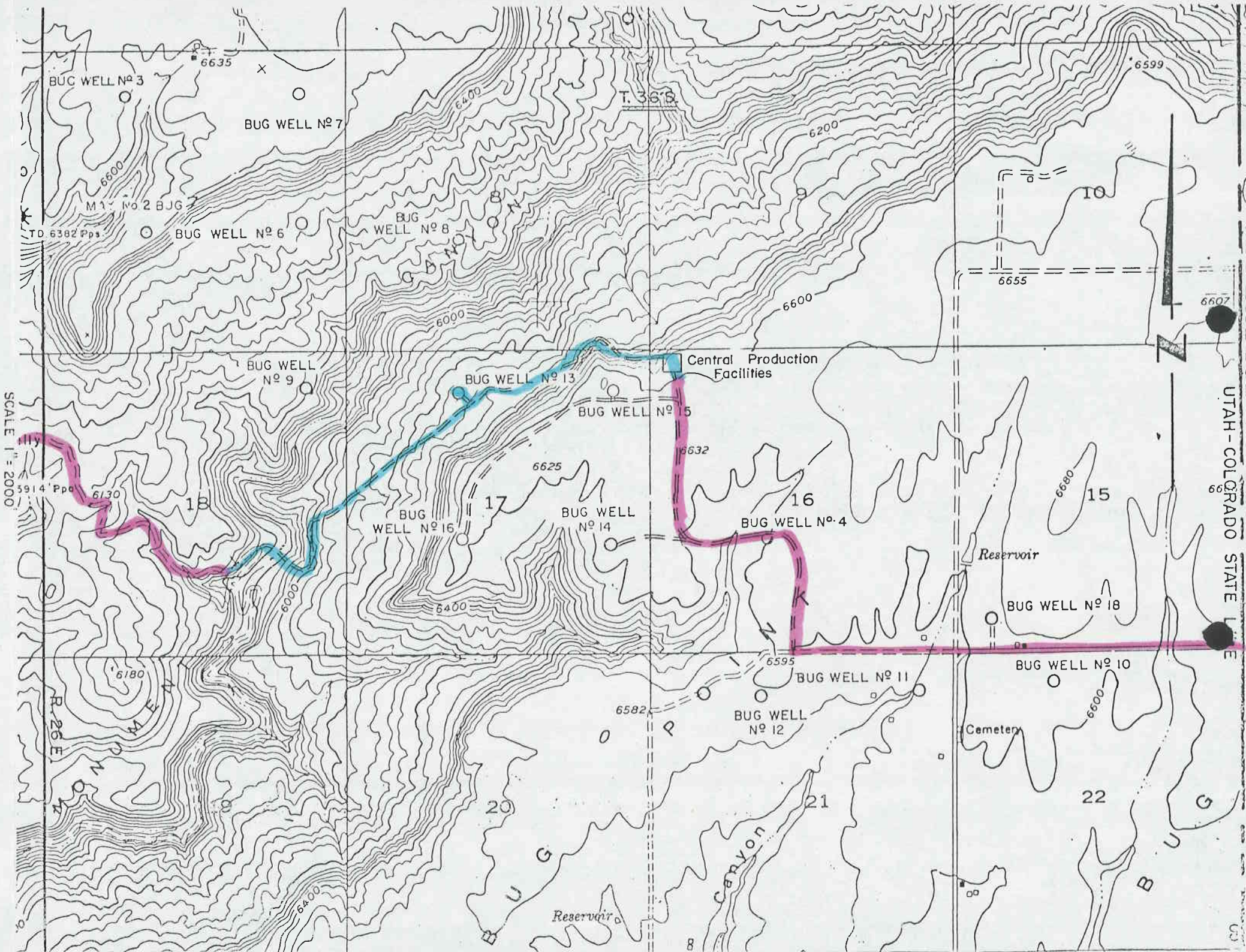
SPECIAL STACK REQUIREMENTS



STANDARD CHASE AND RIG REQUIREMENTS

No.	Item	Qty.	Unit	Size	Notes
1	Drilling Rig				
2	Drilling Pipe				
3	Drilling Bit				
4	Drilling Mud				
5	Drilling Mud Pump				
6	Drilling Mud Tank				
7	Drilling Mud Separator				
8	Drilling Mud Filter				
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35	Drilling Mud Storage				
36	Drilling Mud Transport				
37	Drilling Mud Disposal				
38	Drilling Mud Recycling				
39	Drilling Mud Reuse				
40	Drilling Mud Storage				

AREA MAP
FOR
BUG WELL LOCATIONS
BUG No 13



DEVELOPMENT PLAN FOR U.S.G.S. APPROVAL OF SURFACE USE
WEXPRO DRILLING WELLS

Well Name: Bug Well No. 13

Field or Area: Bug

1. Existing Roads:

A) Proposed well site as staked: Refer to well location plat no. M-15549 , well pad layout map no. M-15550 and area map no. M-15552 for location of well, access road, cuts and fills, directional reference stakes, etc.

B) Route and distance from nearest town or locatable reference point to where well access route leaves main road: Refer to area map no. M-15552
From the well to Dove Creek, Colorado is 12 miles.

C) Access road to location: Refer to well location plat no. M-15549 and area map no. M-15552 for access road. (Color coded red for existing road and blue for road to be constructed.

D) If exploratory well, all existing roads within a 3-mile radius of well site:
Not an exploratory well.

E) If development well, all existing roads within a 1-mile radius:
Refer to area map M-15552.

F) Plans for improvement and/or maintenance of existing roads:
Existing roads as far as Bug Well No. 15 have been or will be improved with additional base material and culverts as necessary.

2. Planned Access Road:

A) Width - 18' wide from shoulder to shoulder.

B) Maximum grade - The maximum grade on the road is 8 percent.

C) Turnouts - No turnouts will be constructed.

D) Drainage design - A drainage ditch on the uphill side of the road will be constructed. It will be a minimum of one foot below the surface of the road.
No water diversion ditches are anticipated.

E) Location and size of culverts and description of major cuts and fills -

1) From the location to the proposed Monument Canyon road no culverts are anticipated.

2) Some major cuts and fills will be necessary on the location and possibly along the access road.

F) Surfacing material - None anticipated.

G) Necessary gates, cattle guards or fence cuts - None required.

H) New or reconstructed roads - The new road to be constructed is center line flagged.

3. Location of Existing Wells - Refer to area map no. M-15552

A) Water wells - None within a 1 mile radius.

- B) Abandoned wells - None within a 1 mile radius.
- C) Temporarily abandoned wells - None within a 1 mile radius.
- D) Disposal wells - None within a 1 mile radius.
- E) Drilling wells - None within a 1 mile radius.
- F) Producing wells - None within a 1 mile radius.
- G) Shut-in wells - None within a 1 mile radius.
- H) Injection wells - None within a 1 mile radius.
- I) Monitoring or observation wells for other resources - None within a 1 mile radius.

4. Location of Existing and/or Proposed Facilities - Refer to area map no. M-15552

- A) 1) Tank Batteries - A tank battery exists at Bug Well No. 4.
- 2) Production Facilities - Oil production facilities at Bug Well No. 4 location.
- 3) Oil Gathering Lines - None at this time.
- 4) Gas Gathering Lines - None at this time.
- 5) Injection Lines - None at this time.
- 6) Disposal Lines - None at this time.
- B) 1) Proposed location and attendant lines by flagging if off the well pad -
A production line will follow access road to a central production area if the well is found to be productive.
- 2) Dimensions of facilities - refer to drawing M-15550.
- 3) Construction methods and materials - No additional area will be required off the existing location surface damage. The production equipment will be all prefabricated equipment & only the tankage will be assembled on the location. The dehydrator, treater & compressor will be skid mounted & set on gravel & wood plank base. The tankage will have a fire dyke installed around it. All the on-location lines will be buried approximately 30". The sump pits will be fenced & unlined.
- 4) Protective measures and devices to protect livestock and wildlife -
All sump pits will be fenced. The fence shall be woven wire at least 48-inches high and within 4-inches of the ground. If oil is in the sump pit, the pit will be overhead flagged to keep birds out.

- C) Plans for rehabilitation of disturbed area no longer needed for operations after construction is completed - Areas of none use will be restored and reseeded as recommended by the B.L.M.
5. Location and Type of Water Supply -
- A) Location of Water - Water will be taken from a reservoir in Section 16, T.36S., R.26E., belonging to C. Sanchez.
- B) Method of Transporting Water - To be hauled by 100 bbl. tank trucks over existing access roads.
- C) Water Well to be Drilled on Lease - None anticipated.
6. Source of Construction Material - None anticipated.
- A) Information - None.
- B) Identify if from Federal or Indian land - None.
- C) Where materials are to be obtained and used - None.
- D) Access roads crossing Federal or Indian lands - None.
7. Method for Handling Waste Disposal -
- A-D) Cuttings and drilling fluids will be placed in the mud pit. Any produced liquids will be placed in test tanks and hauled out by tank trucks. A chemical toilet will be installed on the well pad. The mud pit shall be constructed with at least 1/2 of its holding capacity below ground level. It shall be fenced as described in Section 10-A.
- E) Garbage and other waste material will be placed in the burn pit and covered over with wire mesh to contain the garbage.
- F) After drilling operations have been completed, the location will be cleared of litter, and the trash will be burned in the burn pit. The burn pit will be covered over. The mud pit liquids will be allowed to evaporate. Any fill material on the mud pit will be compacted with heavy equipment.
8. Ancillary Facilities - No camps or airstrips exist now, and Wexpro Company has no plans to build them.
9. Well Site Layout - Refer to drawing no. M- 15550
- 1) Refer to drawing no. M- 15551 for cross section of drill pad and mud pit with cuts and fills.
- 2, 3) Refer to the location plat for location of mud tanks, reserve pit, burn pit, pipe racks, living facilities, soil material stockpile, rig orientation, parking areas and access roads.
- 4) The mud pit is to be unlined.
10. Plans for Restoration of Surface -
- A) After drilling operations, the well site will be cleared and cleaned and the burn pit filled in. Should the well be a dry hole, the surface will be restored to the extent that it will blend in with the landscape. Prior to the onset of drilling, the mud pit shall be fenced on three sides. Immediately upon completion of drilling, the fourth side of the pit will be fenced. The fence will be maintained until restoration.
- B) Revegetation and rehabilitation of the location and access road will be done to comply with Bureau of Land Management recommendations.
- C) Prior to rig release, pits will be fenced and so maintained until clean up. The trash pit will be dug so when filled, the depth will be at least three-feet below the finished contour of the location.

D) If oil is in the mud pit, overhead flagging will be installed to keep birds out.

11. Other Information -

A) The location lies on a bench between Monument Canyon and Bug Point. The vegetation is juniper trees and native grasses. Soil is sandy with some large sandstone slabs in the area.

B) The surface at the well site and the access road through Section 17 is U. S. Government. A portion of the access is through C. Sanchez in Section 16.

C) There are no archaeological, historical or cultural sites in the proposed area or disturbance to my knowledge.

12. Lessee's or Operator's Representative -

A. J. Maser, Drilling Superintendent, P. O. Box 1129, Rock Springs, Wyoming 82901, Telephone No. 307-362-5611.

13. Certification -

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Wexpro Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date 10/24/80

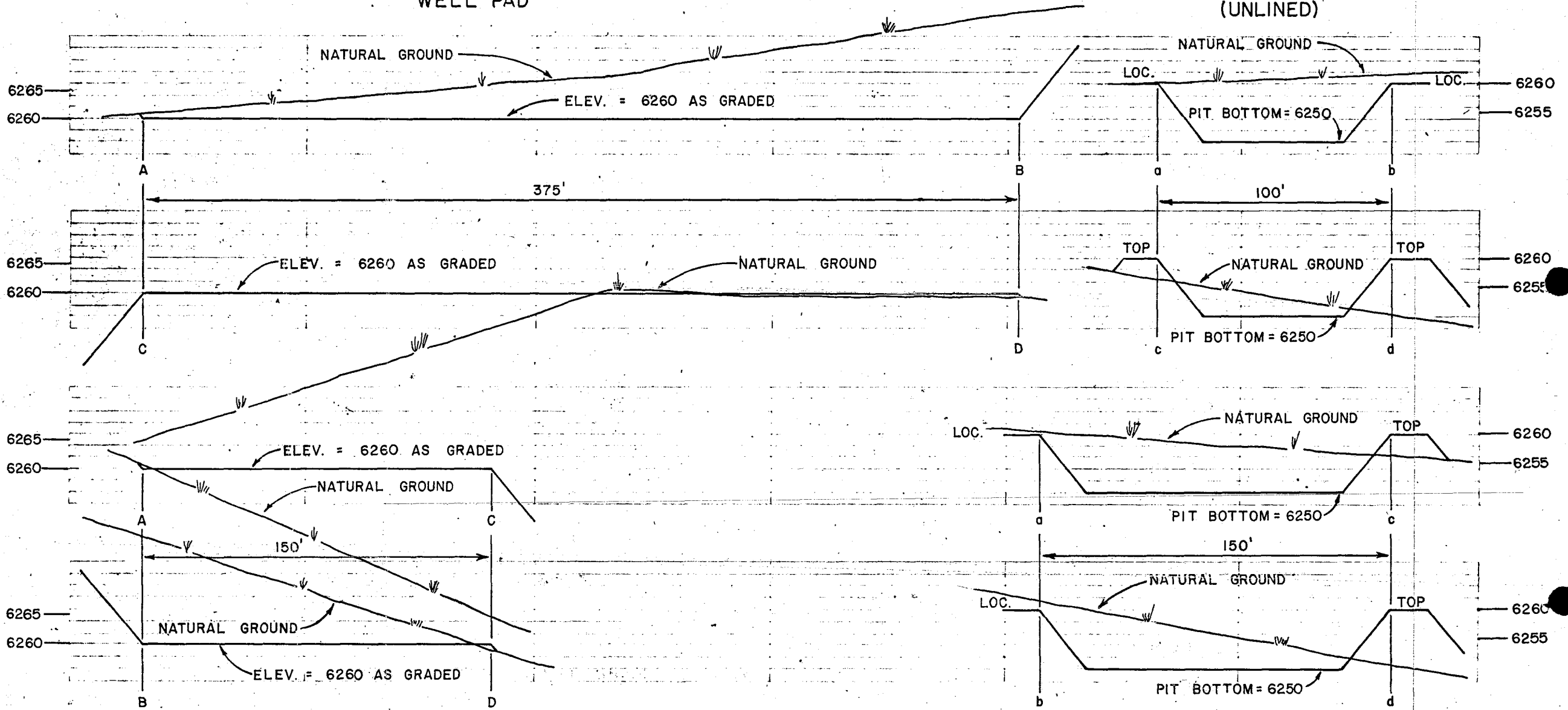
Name

A. J. Maser

Title Drilling Superintendent

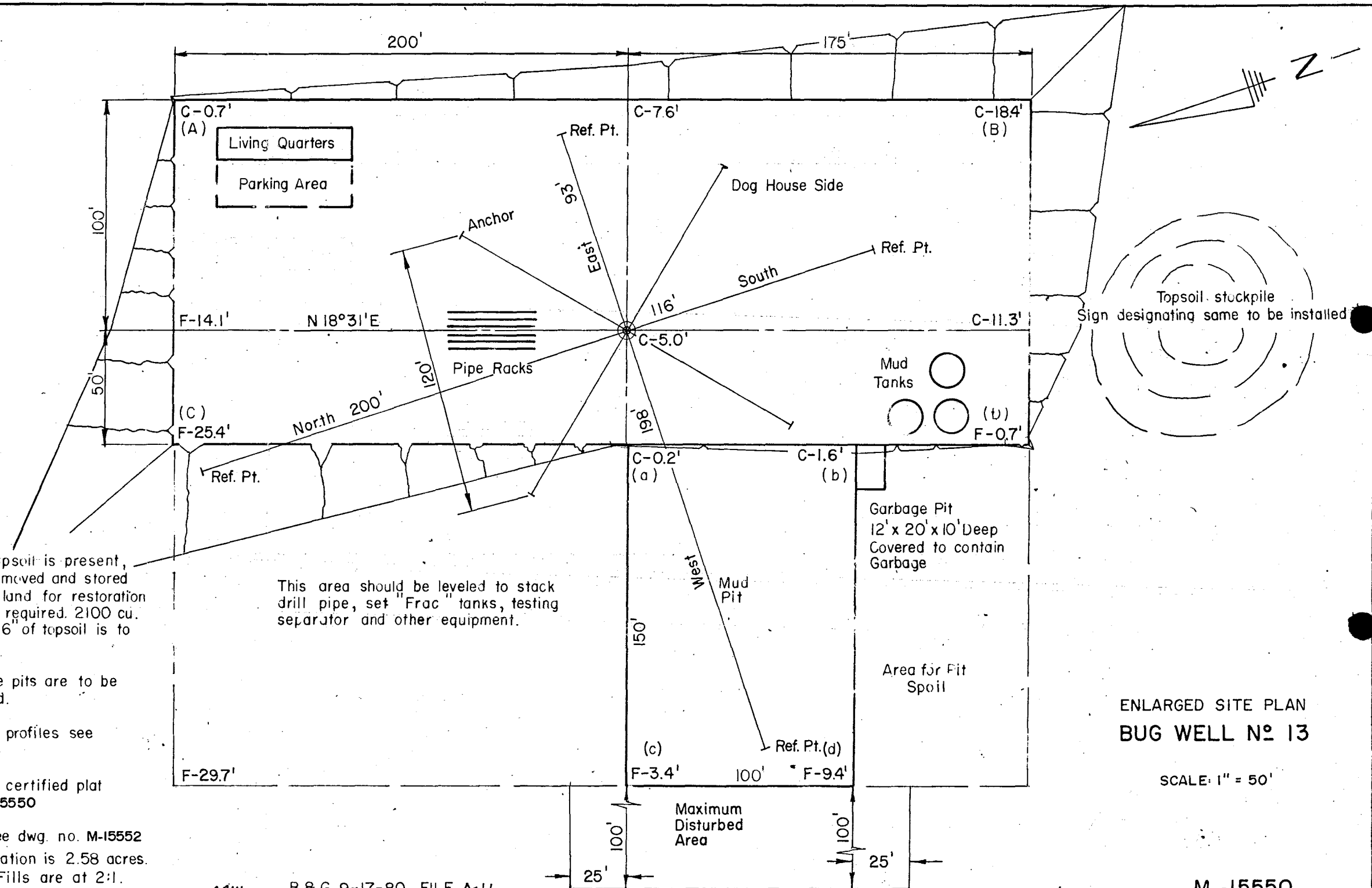
WELL PAD

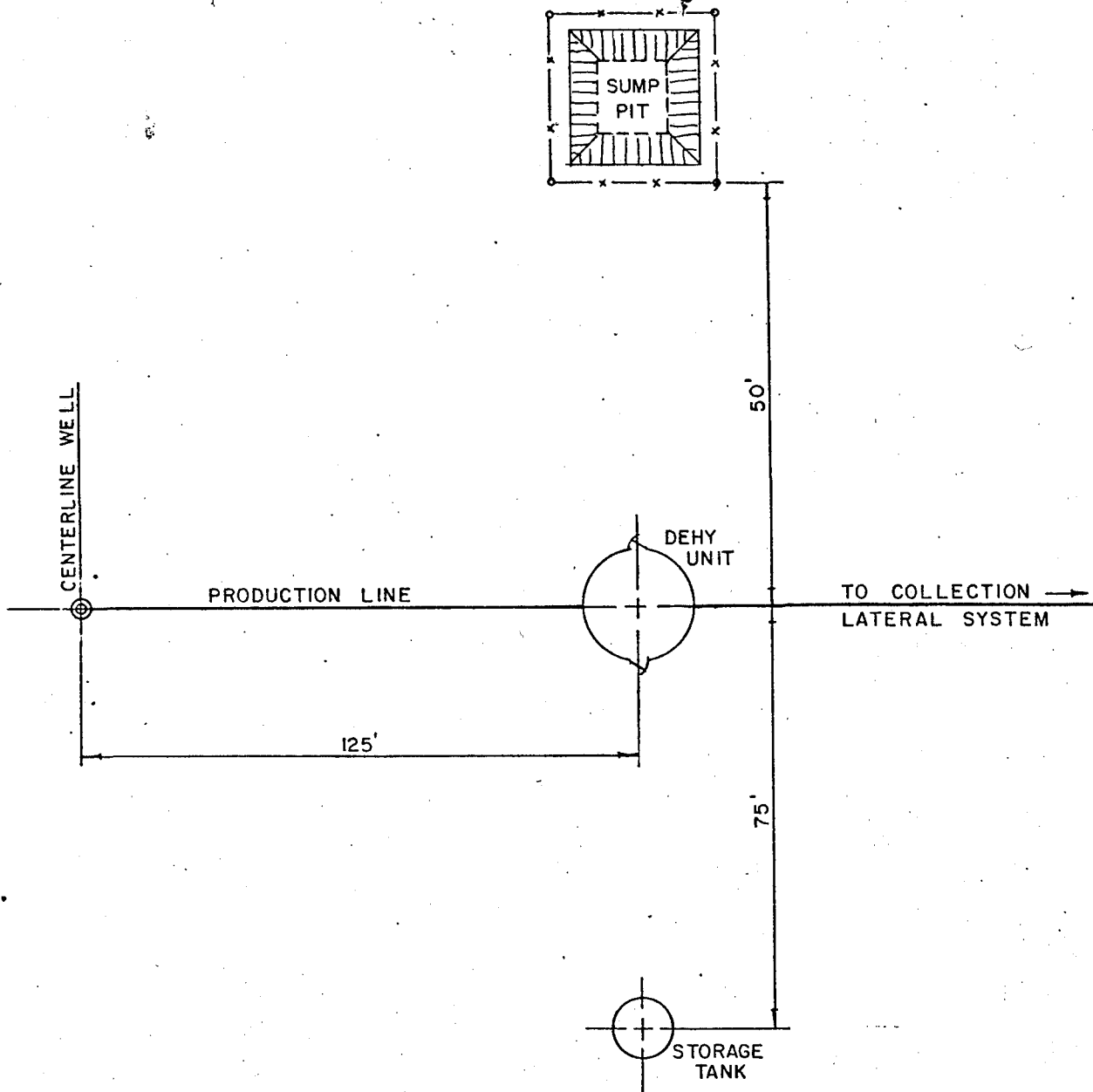
MUD PIT (UNLINED)



PROFILE SECTION PROFILE GRADE LOCATION
 SCALE - HORIZ. : 1" = 50'
 VERT. : 1" = 20'
 CUTS - 2:1
 FILLS - 2:1

PROFILE SECTIONS
 BUG WELL NO. 13.





REVISIONS			
NO.	DESCRIPTION	DATE	BY

WEXPRO COMPANY

TYPICAL PRODUCTION
FACILITIES LAYOUT
FOR
BUG WELL N^o 13

DRAWN: 7/9/76 FJC	SCALE: NONE
CHECKED: CRW	DRWG. NO. M-12205
APPROVED:	

**** FILE NOTATIONS ****

DATE: November 3, 1980

OPERATOR: Wexpro Company

WELL NO: Bug #13

Location: Sec. 17 T. 36S R. 26E County: San Juan

File Prepared: ☐

Entered on N.I.D: ☐

Card Indexed: ☐

Completion Sheet: ☐

API Number 43-037-30610

CHECKED BY:

Petroleum Engineer: M. S. Minder 11-4-80

Director: _____

Administrative Aide: OK as per spacing order

APPROVAL LETTER:

Bond Required: ☐

Survey Plat Required: ☐

Order No. 186-1, 2/27/80

O.K. Rule C-3 ☐

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site ☐

Lease Designation Fed.

Plotted on Map ☒

Approval Letter Written ☒

Hot Line ☒

P.I. ☒

November 4, 1980

Wexpro Company
P. O. Box 1129
Rock Springs, Wyoming 82901

Re: Well No. Bug #13
Sec. 17, T. 36S, R. 26E
San Juan County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil well is hereby granted in accordance with the Order issued in Cause No.186-1 dated February 27, 1980.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

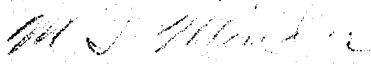
Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-037-30610.

Sincerely,

DIVISION OF OIL, GAS, AND MINING


Michael T. Minder
Petroleum Engineer

/ka
cc: USGS

SCOTT M. MATHESON
Governor

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

CLEON B. FEIGHT
Director



STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

1588 West North Temple

Salt Lake City, Utah 84116

(801) 533-5771

June 18, 1981

OIL, GAS, AND MINING BOARD

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Chairman

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
MAXILIAN A. FARBMAN
EDWARD T. BECK
E. STEELE MCINTYRE

Wexpro Company
P. O. Box 1129
Rock Springs, Wyoming 82901

Re: See Attached Sheet

Gentlemen:

In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If you plan on drilling these locations at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Sandy Bates
Sandy Bates
Clerk-Typist

*will send 7-22/81
Sandy's Petition in
within 1 week
status of these
wells!!*

no 1. Well No. Patterson Unit #3
Sec. 32, T. 37S, R. 25E
San Juan County, Utah

no 2. Well No. Bug #5
Sec. 15, T. 36S, R. 26E
San Juan County, Utah

yes { 3. Well No. Bug #13
Sec. 17, T. 36S, R. 26E
San Juan County, Utah

4. Well No. Bug #11
Sec. 21, T. 36S, R. 26E.
San Juan County, Utah

5. Well No. Bug #9
Sec. 18, T. 36S, R. 26E
San Juan County, Utah

Jennifer Head
Aspio Co.

DIVISION OF OIL, GAS AND MINING

SPODDING INFORMATION

NAME OF COMPANY: Wexpro

WELL NAME: Bug #13 U-23161

NE NW
SECTION 17 TOWNSHIP 36S RANGE 26E COUNTY San Juan

DRILLING CONTRACTOR Arapahoe Drilling Co.

RIG # 4

SPODDED: DATE 9-19-81

TIME 5:00 a.m.

How Rotary

DRILLING WILL COMMENCE 9-19-81

REPORTED BY Paul Zubatch

TELEPHONE # (307) 382-9791

DATE 9-21-81 SIGNED Thalia Pratt

JOHNSTON-MACCO

Schlumberger

DISTRIBUTION FOR TECHNICAL REPORTS

JS-223-A

COMPANY

WEXPRO COMPANY

CUSTOMER

SAME

COUNTY

SAN JUAN

WELL

BUG

FIELD

BUG

STATE

UTAH

FIELD REPORT NO.

32325 D

DATE

10-1-81

NO.

13

☒ THIS TEST ONLY ☐ ALL TESTS ON THIS WELL

JOHNSTON-MACCO HAS BEEN REQUESTED TO FURNISH THE FOLLOWING COMPANIES WITH TECHNICAL REPORTS. THIS DISTRIBUTION WILL BE AS INDICATED AT LEFT UNLESS OTHERWISE STATED.

2

WEXPRO COMPANY

☐

P.O. BOX 1129

ROCK SPRINGS, WY 82901

ATTN: TOM COLSON

2

U.S.G.S.

☐

DIST. ENG.

P.O. BOX 1809

DURANGO, CO 81301

2

UTAH OIL GAS & MINING

☐

1588 WEST N. TEMPLE

SALT LAKE CITY, UTAH 84116

2

MOUNTAIN FUEL COMPANY

☐

P.O. BOX 11368

SALT LAKE CITY, UTAH 84139

ATTN: ROGER FALLON

2

MOUNTAIN FUEL COMPANY

☐

P.O. BOX 2329

FARMINGTON, NM 87401

ATTN: NICK THOMAIDIS

1

KENAI OIL & GAS, INC.

☐

ENERGY CENTER 1

717 - 17TH ST.; SUITE 2000

DENVER, CO 80202 ATTN: JOSEPH R. MAZZOLA

RECEIVED
OCT 16 1971

DIVISION OF
OIL, GAS & MINING

JOHNSTON-MACCO

Schlumberger

technical report

FIELD REPORT #32325 D

COMPANY WEXPRO COMPANY WELL BUG #13 TEST NO. 1 COUNTY SAN JUAN STATE UTAH

* TEST TICKET DATA PRINTOUT *

WELL IDENTIFICATION

1. WELL	:	BUG #13
2. COMPANY	:	WEXPRO COMPANY
3.	:	P.O. BOX 1129
4.	:	ROCK SPRINGS, WYOMING 82901
5. CUSTOMER	:	SAME
6.	:	
7.	:	
8. FIELD	:	BUG
9. COUNTY	:	SAN JUAN
10. STATE/PROV.	:	UTAH
11. LOCATION	:	SEC. 17, T36S R26E
12. TECHNICIAN	:	REDINGER (OGDEN)
13. TEST APPROVED BY	:	MR. MICHAEL R. SLIGER
14. TEST DATE	:	10-1-81
15. DEPTH REFERENCE	:	KELLY BUSHING
16. DEPTH REFERENCE ELEVATION	:	S.L. 6274. FT

HOLE INFORMATION

1. THE HOLE IS STRAIGHT.	
2. TOTAL DEPTH	: 5143. FT
3. OPEN HOLE DIAMETER	: 8.75 IN

MUD INFORMATION

1. MUD TYPE	:	WATER BASE
2. MUD WEIGHT	:	8.7 LB/GAL
3. MUD VISCOSITY	:	33. MARSH FUNNEL SEC
4. CORRECTED WATER LOSS	:	18.4 CC/30 MIN
5. MUD RESISTIVITY	:	— OHM-M
6. MUD RES. MEAS. TEMP.	:	— DEG F
7. MUD FILTRATE RESISTIVITY	:	— OHM-M
8. MUD FILT. RES. MEAS. TEMP.	:	— DEG F
9. MUD CHLORIDES CONTENT	:	— PPM BY WEIGHT

 * TEST TICKET DATA PRINTOUT *

TEST INFORMATION

1. FIELD REPORT NUMBER : 32325D
 2. TEST TYPE : M.F.E. OPEN HOLE
 3. TEST NUMBER : 1
 4. TELEFLOW IN USE ? : NO
 5. SSDR OR J-300 IN USE ? : NO
 6. SPRO IN USE ? : NO
 7. PTSOL IN USE ? : NO

TEST STRING INFORMATION

#	COMPONENT NAME	EFFECTIVE		FLOW PATH LENGTH (FT)	J/M CODE
		I.D. (IN)	O.D. (IN)		
1	DRILL PIPE				
2	DRILL COLLARS				
3	TEST TOOL STRING	0.93	5.00	111.	

TEST STRING PLACEMENT

1. TEST TYPE CODE 1 - ON BOTTOM
 2. PACKER DEPTHS : 5067. FT & 5072. FT

TEST ZONE DESCRIPTION

	FORMATION NAME	TOP (FT)	BOTTOM (FT)	PRODUCTION ZONE	
				THICKNESS (FT)	POROSITY (%)
1	PARADOX			15.	8.

TEST CONDITIONS

1. BOTTOMHOLE CHOKE(S) EFF. INTERNAL DIA. : 0.93 IN.

 * TEST TICKET DATA PRINTOUT *

TEST TOOL SAMPLE CHAMBER RECOVERY DATA

SAMPLE PRESSURE : 103. PSIG
 OIL GRAVITY : DEG. API @ DEG F
 GAS/OIL RATIO : FT3/BBL
 GAS/LIQUID RATIO : 1003. FT3/BBL

SAMPLE CHAMBER CONTENTS

FLUID	VOLUME	RESISTIVITY	CHLORIDES
GAS	0.65 FT3		
OIL	CC		
WATER	103.0 CC	1.90 OHM-M @ 60.0 DEG F	80000. PPM
MUD	CC	OHM-M @ DEG F	
TOTAL LIQUID	103.0 CC		

RECOVERY INFORMATION

DESCRIPTION	FEET	Z			API		RESISTIVITY		CHL
		OIL	H2O	OTH	DEG.	DEG.F	OHM-M	DEG.F	PPM
1 SLIGHTLY GAS CUT MUD.	250								

SURFACE INFORMATION

DESCRIPTION	TIME	PRESSURE	CHOKE SIZE
1 SET PACKER	0231	-	-
2 OPENED TOOL	0232	-	1/4"
3 CLOSED FOR INITIAL SHUT-IN	0300	-	"
4 FINISHED SHUT-IN	0431	-	"
5 RE-OPENED TOOL	0432	-	"
6 CLOSED FOR SECOND SHUT-IN	0600	-	"
7 FINISHED SHUT-IN	0950	-	"
8 RE-OPENED TOOL	0951	82	"
9	1010	79	"
10	1018	76	"
11	1022	74	"
12	1026	72	"
13	1038	70	"
14	1052	69	"
15 CLOSED FOR FINAL SHUT-IN	1121	68	"
16 FINISHED SHUT-IN	1431	-	"

* TEST TICKET DATA PRINTOUT *

DESCRIPTION	TIME	PRESSURE	CHOKE SIZE
17 PULLED PACKER LOOSE	1433	-	-

REMARKS: CONTROL HEAD VALVE CLOSED PRIOR TO
FINAL FLOW.

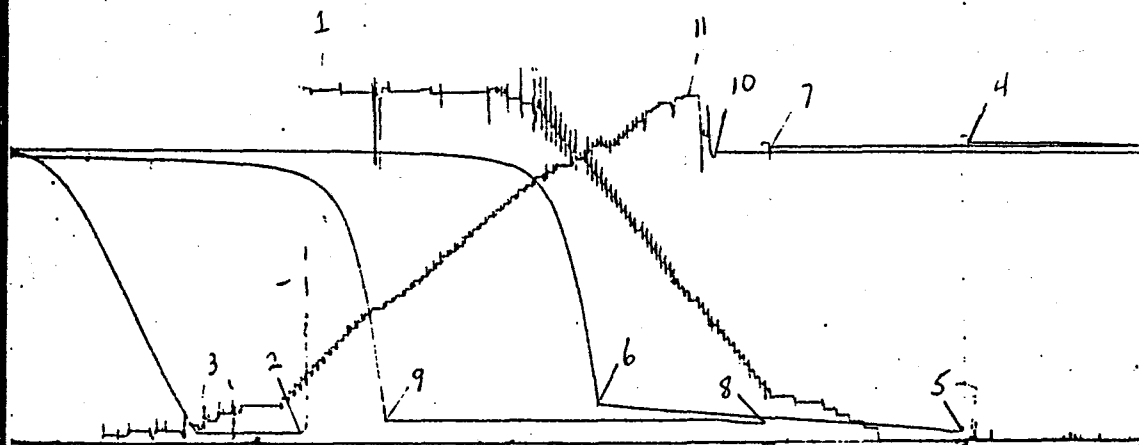
FIELD REPORT NO.: 32325 D

CAPACITY: 6400#

INSTRUMENT NO.: J-1897

NUMBER OF REPORTS: 11

JOHNSTON
Schlumberger



BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 32325D

COMPANY : WEXPRO COMPANY

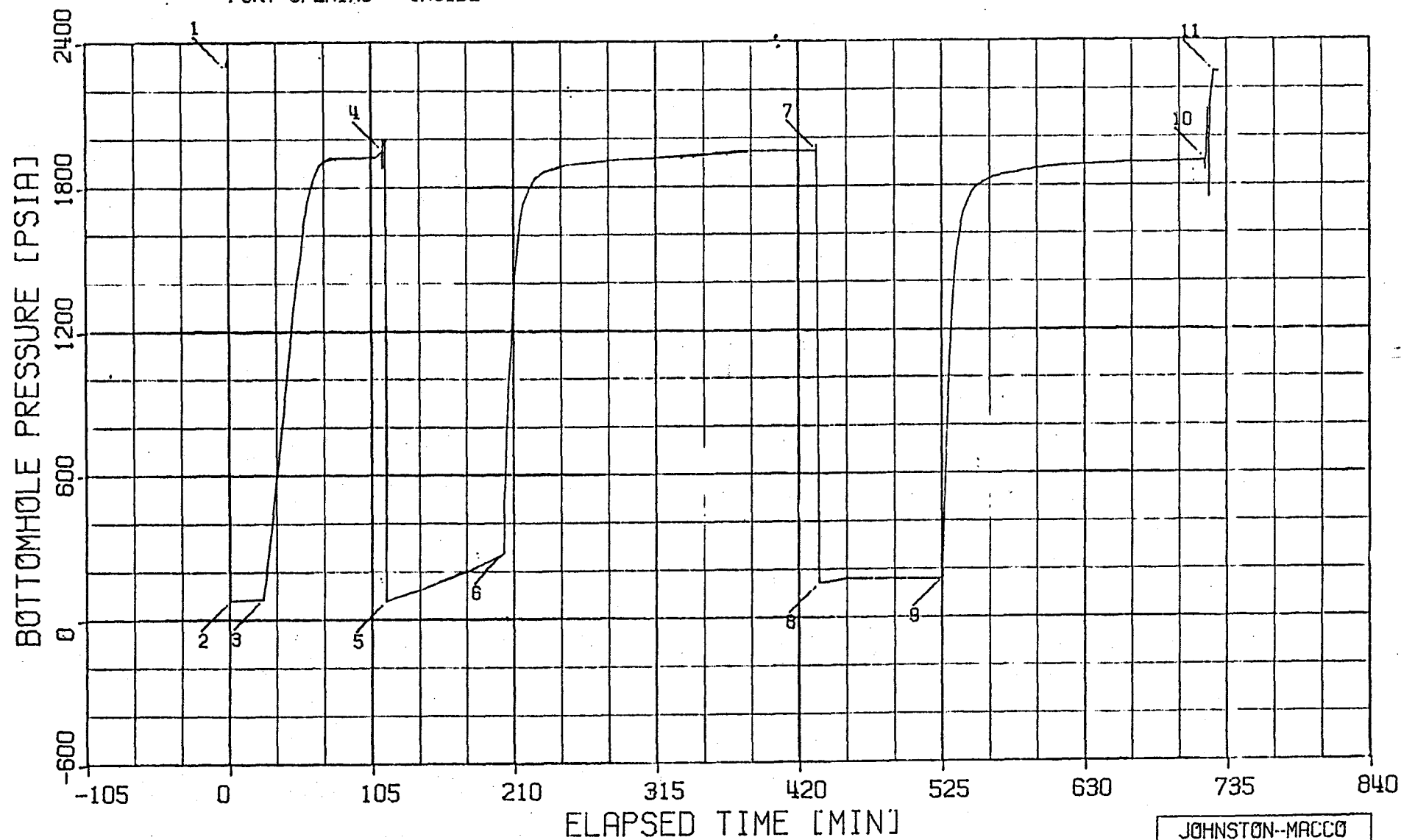
INSTRUMENT NO. J-1897

WELL : BUG #13

DEPTH : 5073 FT

CAPACITY : 6400 PSI

PORT OPENING : INSIDE



JOHNSTON-MACCO
SCHLUMBERGER

 * WELL TEST DATA PRINTOUT *

FIELD REPORT # : 32325D

COMPANY : WEXPRO COMPANY
 WELL : BUG #13

INSTRUMENT # : J-1897
 CAPACITY [PSI] : 6400.
 DEPTH [FT] : 5073.0
 PORT OPENING : INSIDE
 TEMPERATURE [DEG F] : 130.0

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA
***	*****	*****	*****	*****	*****
1	2:27:20	1-0C	HYDROSTATIC MUD	-4.67	2304.67
2	2:32: 0	1-0C	START FLOW	0.00	83.79
3	2:56:18	1-0C	END FLOW & START SHUT-IN	24.30	89.55
4	4:24:43	1-0C	END SHUT-IN	112.72	1952.64
5	4:26:29	1-0C	START FLOW	114.49	79.95
6	5:54: 1	1-0C	END FLOW & START SHUT-IN	202.02	277.55
7	9:44:37	1-0C	END SHUT-IN	432.61	1946.89
8	9:46:10	1-0C	START FLOW	434.16	145.50
9	11:17: 4	1-0C	END FLOW & START SHUT-IN	525.07	172.36
10	14:30:13	1-0C	END SHUT-IN	718.21	1905.96
11	14:36:35	1-0C	HYDROSTATIC MUD	724.59	2271.74

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA
*****	*****	*****	*****	*****	*****
1	0.00	24.30	24.30	83.79	89.55
2	114.49	202.02	87.53	79.95	277.55
3	434.16	525.07	90.91	145.50	172.36

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
*****	*****	*****	*****	*****	*****	*****	*****
1	24.30	112.72	88.42	89.55	1952.64	89.55	24.30
2	202.02	432.61	230.59	277.55	1946.89	277.55	111.83
3	525.07	718.21	193.14	172.36	1905.96	172.36	202.74

TEST PHASE : FLOW PERIOD # 1

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA
HH:MM:SS	DD-MM	*****	*****	*****
2:32:0	1-0C	0.00	0.00	83.79
2:37:0	1-0C	5.00	5.00	84.71
2:42:0	1-0C	10.00	10.00	85.63
2:47:0	1-0C	15.00	15.00	86.55
2:52:0	1-0C	20.00	20.00	86.67
2:56:18	1-0C	24.30	24.30	89.55

TEST PHASE : SHUTIN PERIOD # 1

FINAL FLOW PRESSURE [PSIA] = 89.55
 PRODUCING TIME [MIN] = 24.30

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
HH:MM:SS	DD-MM	*****	*****	*****	*****	*****
2:56:18	1-0C	24.30	0.00	89.55	0.00	
2:57:18	1-0C	25.30	1.00	130.99	41.44	1.403
2:58:18	1-0C	26.30	2.00	172.44	82.89	1.119
2:59:18	1-0C	27.30	3.00	217.17	127.62	0.959
3:00:18	1-0C	28.30	4.00	262.52	172.97	0.850
3:01:18	1-0C	29.30	5.00	308.14	218.59	0.768
3:02:18	1-0C	30.30	6.00	355.39	265.84	0.703
3:03:18	1-0C	31.30	7.00	402.63	313.08	0.650
3:04:18	1-0C	32.30	8.00	452.50	362.95	0.606
3:05:18	1-0C	33.30	9.00	510.25	420.70	0.568
3:06:18	1-0C	34.30	10.00	568.01	478.46	0.535
3:08:18	1-0C	36.30	12.00	675.29	585.74	0.481
3:10:18	1-0C	38.30	14.00	786.07	696.52	0.437
3:12:18	1-0C	40.30	16.00	901.21	811.66	0.401
3:14:18	1-0C	42.30	18.00	1015.91	926.36	0.371
3:16:18	1-0C	44.30	20.00	1128.34	1038.79	0.345
3:18:18	1-0C	46.30	22.00	1238.32	1148.77	0.323
3:20:18	1-0C	48.30	24.00	1345.56	1256.01	0.304
3:22:18	1-0C	50.30	26.00	1430.53	1340.98	0.287
3:24:18	1-0C	52.30	28.00	1510.27	1420.72	0.271
3:26:18	1-0C	54.30	30.00	1622.94	1533.39	0.258
3:31:18	1-0C	59.30	35.00	1789.21	1699.66	0.229
3:36:18	1-0C	64.30	40.00	1875.80	1786.25	0.206
3:41:18	1-0C	69.30	45.00	1911.73	1822.18	0.188
3:46:18	1-0C	74.30	50.00	1924.30	1834.75	0.172
3:51:18	1-0C	79.30	55.00	1925.71	1836.16	0.159
3:56:18	1-0C	84.30	60.00	1926.62	1837.07	0.148
4:11:18	1-0C	99.30	75.00	1928.62	1839.07	0.122
4:24:43	1-0C	112.72	88.42	1952.64	1863.09	0.105

TEST PHASE : FLOW PERIOD # 2

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA
HH:MM:SS	DD-MM	*****	*****	*****
4:26:29	1-0C	114.49	0.00	79.95
4:41:29	1-0C	129.49	15.00	111.46
4:56:29	1-0C	144.49	30.00	138.35
5:11:29	1-0C	159.49	45.00	170.74
5:26:29	1-0C	174.49	60.00	200.27
5:41:29	1-0C	189.49	75.00	236.85
5:54: 1	1-0C	202.02	87.53	277.55

TEST PHASE : SHUTIN PERIOD # 2

FINAL FLOW PRESSURE [PSIA] = 277.55
 PRODUCING TIME [MIN] = 111.83

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
HH:MM:SS	DD-MM	*****	*****	*****	*****	*****
5:54: 1	1-0C	202.02	0.00	277.55	0.00	
5:55: 1	1-0C	203.02	1.00	582.78	305.23	2.052
5:56: 1	1-0C	204.02	2.00	737.22	459.67	1.755
5:57: 1	1-0C	205.02	3.00	874.65	597.10	1.583
5:58: 1	1-0C	206.02	4.00	991.76	714.21	1.462
5:59: 1	1-0C	207.02	5.00	1090.05	812.50	1.369
6: 0: 1	1-0C	208.02	6.00	1188.33	910.78	1.293
6: 1: 1	1-0C	209.02	7.00	1291.04	1013.49	1.230
6: 2: 1	1-0C	210.02	8.00	1397.68	1120.13	1.175
6: 3: 1	1-0C	211.02	9.00	1466.41	1188.86	1.128
6: 4: 1	1-0C	212.02	10.00	1525.65	1248.10	1.086
6: 6: 1	1-0C	214.02	12.00	1635.77	1358.22	1.014
6: 8: 1	1-0C	216.02	14.00	1703.52	1425.97	0.954
6:10: 1	1-0C	218.02	16.00	1746.31	1468.76	0.903
6:12: 1	1-0C	220.02	18.00	1775.68	1498.13	0.858
6:14: 1	1-0C	222.02	20.00	1801.19	1523.65	0.819
6:16: 1	1-0C	224.02	22.00	1823.82	1546.27	0.784
6:18: 1	1-0C	226.02	24.00	1840.00	1562.45	0.753
6:20: 1	1-0C	228.02	26.00	1848.31	1570.76	0.724
6:22: 1	1-0C	230.02	28.00	1856.62	1579.07	0.698
6:24: 1	1-0C	232.02	30.00	1863.76	1586.21	0.675
6:29: 1	1-0C	237.02	35.00	1874.62	1597.07	0.623
6:34: 1	1-0C	242.02	40.00	1882.73	1605.18	0.579
6:39: 1	1-0C	247.02	45.00	1889.33	1611.78	0.542
6:44: 1	1-0C	252.02	50.00	1894.06	1616.51	0.510
6:49: 1	1-0C	257.02	55.00	1897.62	1620.07	0.482
6:54: 1	1-0C	262.02	60.00	1900.59	1623.04	0.457
7: 9: 1	1-0C	277.02	75.00	1908.70	1631.15	0.396
7:24: 1	1-0C	292.02	90.00	1914.43	1636.88	0.351
7:39: 1	1-0C	307.02	105.00	1917.74	1640.19	0.315
7:54: 1	1-0C	322.02	120.00	1922.51	1644.96	0.286

TEST PHASE : SHUTIN PERIOD # 2

FINAL FLOW PRESSURE [PSIA] = 277.55

PRODUCING TIME [MIN] = 111.83

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
HH:MM:SS	DD-MM	*****	*****	*****	*****	*****
8: 9: 1	1-0C	337.02	135.00	1924.83	1647.28	0.262
8:24: 1	1-0C	352.02	150.00	1938.38	1660.83	0.242
8:39: 1	1-0C	367.02	165.00	1943.89	1666.34	0.225
8:54: 1	1-0C	382.02	180.00	1946.25	1668.70	0.210
9: 9: 1	1-0C	397.02	195.00	1946.25	1668.70	0.197
9:24: 1	1-0C	412.02	210.00	1946.25	1668.70	0.185
9:39: 1	1-0C	427.02	225.00	1946.25	1668.70	0.175
9:44:37	1-0C	432.61	230.59	1946.89	1669.34	0.172

TEST PHASE : FLOW PERIOD # 3

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA
HH:MM:SS	DD-MM	*****	*****	*****
9:46:10	1-0C	434.16	0.00	145.50
10: 1:10	1-0C	449.16	15.00	158.27
10:16:10	1-0C	464.16	30.00	164.36
10:31:10	1-0C	479.16	45.00	164.36
10:46:10	1-0C	494.16	60.00	164.36
11: 1:10	1-0C	509.16	75.00	164.37
11:16:10	1-0C	524.16	90.00	170.15
11:17: 4	1-0C	525.07	90.91	172.36

TEST PHASE : SHUTIN PERIOD # 3

FINAL FLOW PRESSURE [PSIA] = 172.36

PRODUCING TIME [MIN] = 202.74

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
HH:MM:SS	DD-MM	*****	*****	*****	*****	*****
11:17: 4	1-0C	525.07	0.00	172.36	0.00	
11:18: 4	1-0C	526.07	1.00	408.66	236.30	2.309
11:19: 4	1-0C	527.07	2.00	574.35	401.99	2.010
11:20: 4	1-0C	528.07	3.00	735.09	562.73	1.836
11:21: 4	1-0C	529.07	4.00	887.58	715.22	1.713
11:22: 4	1-0C	530.07	5.00	1040.06	867.70	1.619
11:23: 4	1-0C	531.07	6.00	1152.92	980.56	1.541
11:24: 4	1-0C	532.07	7.00	1255.23	1082.87	1.477
11:25: 4	1-0C	533.07	8.00	1350.06	1177.70	1.421
11:26: 4	1-0C	534.07	9.00	1412.95	1240.59	1.372
11:27: 4	1-0C	535.07	10.00	1475.83	1303.47	1.328

TEST PHASE : SHUTIN PERIOD # 3

FINAL FLOW PRESSURE [PSIA] = 172.36

PRODUCING TIME [MIN] = 202.74

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
HH:MM:SS	DD-MM	*****	*****	*****	*****	*****
11:29: 4	1-0C	537.07	12.00	1574.26	1401.90	1.253
11:31: 4	1-0C	539.07	14.00	1653.29	1480.93	1.190
11:33: 4	1-0C	541.07	16.00	1693.96	1521.60	1.136
11:35: 4	1-0C	543.07	18.00	1722.39	1550.03	1.089
11:37: 4	1-0C	545.07	20.00	1750.31	1577.95	1.047
11:39: 4	1-0C	547.07	22.00	1778.23	1605.87	1.009
11:41: 4	1-0C	549.07	24.00	1792.35	1619.99	0.975
11:43: 4	1-0C	551.07	26.00	1803.92	1631.56	0.944
11:45: 4	1-0C	553.07	28.00	1811.87	1639.51	0.916
11:47: 4	1-0C	555.07	30.00	1819.58	1647.22	0.890
11:52: 4	1-0C	560.07	35.00	1835.26	1662.90	0.832
11:57: 4	1-0C	565.07	40.00	1843.98	1671.62	0.783
12: 2: 4	1-0C	570.07	45.00	1850.26	1677.90	0.741
12: 7: 4	1-0C	575.07	50.00	1855.65	1683.29	0.704
12:12: 4	1-0C	580.07	55.00	1860.13	1687.77	0.671
12:17: 4	1-0C	585.07	60.00	1865.15	1692.79	0.641
12:32: 4	1-0C	600.07	75.00	1878.44	1706.08	0.569
12:47: 4	1-0C	615.07	90.00	1883.68	1711.32	0.512
13: 2: 4	1-0C	630.07	105.00	1887.48	1715.12	0.467
13:17: 4	1-0C	645.07	120.00	1892.12	1719.76	0.430
13:32: 4	1-0C	660.07	135.00	1895.47	1723.11	0.398
13:47: 4	1-0C	675.07	150.00	1896.96	1724.60	0.371
14: 2: 4	1-0C	690.07	165.00	1898.34	1725.98	0.348
14:17: 4	1-0C	705.07	180.00	1899.89	1727.53	0.328
14:30:13	1-0C	718.21	193.14	1905.96	1733.60	0.312

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYForm Approved
Budget Bureau No. 42-R1424

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☒ gas well ☐ other ☐

2. NAME OF OPERATOR

Wexpro Company

3. ADDRESS OF OPERATOR

P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: NE NW 699' FNL, 1998' FWL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐CHANGE ZONES ☐ABANDON* ☐

SUBSEQUENT REPORT OF:

(other) "As graded" elevation change, see #15

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Subsurface Safety Valve: Manu. and Type _____

18. I hereby certify that the foregoing is true and correct

SIGNED

A. J. Maser

TITLE Drlg Supt.

DATE

October 23, 1981

(This space for Federal or State office use)

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ gas ☐ other ☐
well well

2. NAME OF OPERATOR

Wexpro Company

3. ADDRESS OF OPERATOR

P. O. Box 1129, Rock Springs, WY 82901

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: NE NW 699' FNL, 1998' FWL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

CHANGE ZONES ☐

ABANDON* ☐

(other) Supplementary History ☒

5. LEASE

U - 23161

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

-

7. UNIT AGREEMENT NAME

-

8. FARM OR LEASE NAME

Bug

9. WELL NO.

13

10. FIELD OR WILDCAT NAME

Bug

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

17-36S-26E.

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

14. API NO.

43-037-30610

15. ELEVATIONS (SHOW DF, KDB, AND WD)

KB 6255.20'

GR 6241'

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD 6012', rig released October 7, 1981, waiting on completion tools.

Spudded Sept. 19, 1981 at 5 p.m., landed 9-5/8", 36#, K-55, 8rd thd, ST&C casing at 1652.75' KBM, set with 500 sacks regular cement with 2% calcium chloride and with 260 sacks regular cement with 3% calcium chloride, no cement to surface, ran 1" pipe to 60' and cemented with 100 sacks class G cement, cement in place on September 24, 1981 at 9:15 a.m.

Landed 5 1/2", 17#, K-55, 8rd thd, LT&C casing at 6005.85' KBM, set with 350 sacks 50-50 Pozmix A, floating equipment held OK, cement in place October 7, 1981 at 6:35 a.m.

DST #1: 5072-5143', Paradox, IO 1/2 hr, ISI 1 1/2 hrs, 2nd open 1 1/2 hrs, 2nd SI 230 minutes, FO 1 1/2 hrs, FSI 3 hrs, opened dead on 1st and 2nd openings, reopened, 10 minutes 138 Mcf, 26 minutes 121 Mcf, 80 minutes 119 Mcf, recovered 250' gas cut mud, IHP 2289, IOFP's 85-97, ISIP 1932, 2nd FP's 72-263, 2nd SI 1932, FOFP's 148-161, FSIP 1907, FHP 2264.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED P. E. Martin TITLE Asst Drlg Supt DATE 10-29-81

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

NOV 02 1981
GEOLOGICAL SURVEY
MINNAPOLIS

CORE ANALYSIS RESULTS FOR

WEXPRO COMPANY
BUG NO. 13
BUG FIELD
SAN JUAN COUNTY, UTAH

NOV 02 1987
DIVISION OF
OIL, GAS & MINING

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PAGE NO. 1

WEXPRO COMPANY
 BUG NO. 13
 BUG FIELD
 SAN JUAN COUNTY

FORMATION : DESERT CREEK
 DRLG. FLUID: FRESH WATER GEL
 LOCATION : NE NW SEC. 17-T36S-R26E
 STATE : UTAH

DATE : 10-7-81
 FILE NO. : RP-3-3141
 ANALYSTS : DS
 ELEVATION: 6255' KB

WHOLE CORE ANALYSIS--BOYLE'S LAW HELIUM POROSITY

SAMP. NO.	DEPTH	PERM. TO AIR (MD) MAX.	90 DEG.	POR. B.L.	FLUID SATS. OIL WATER	GR. DNS.	DESCRIPTION
	5913-5919						DOLO BRN FN-XLN - NO ANALYSIS
	5919-5921						DOLO ANHY GY FN-XLN - NO ANALYSIS
	5921-5926						ANHY - NO ANALYSIS
1	5926-27	0.01	0.01	1.8	10.5 26.3	2.91	ANHY DOLO GY FN-XLN
2	5927-28	0.01	0.01	6.7	10.2 65.3	2.84	DOLO ERTY FN-XLN
3	5928-29	3.4	2.6	15.4	4.4 46.0	2.82	DOLO ERTY FN-XLN
4	5929-30	5.3	3.0	15.5	2.2 36.7	2.81	DOLO BRN FN-XLN SL/ANHY SL/VJG
5	5930-31	15	6.3	9.3	0.0 30.3	2.86	DOLO BRN FN-XLN SL/ANHY SL/VJG
6	5931-32	5.5	0.01	11.0	1.4 31.9	2.87	DOLO GY FN-XLN VJG SL/ANHY
7	5932-33	6.7	0.01	10.5	4.1 26.2	2.86	DOLO GY FN-XLN VJG SL/ANHY
8	5933-34	24	<0.01	11.1	7.2 32.0	2.84	DOLO GY FN-XLN VJG SL/ANHY
9	5934-35	0.12	<0.01	13.3	7.7 22.2	2.86	DOLO GY FN-XLN VJG SL/ANHY
10	5935-36	14	0.01	11.9	6.9 30.4	2.85	DOLO GY FN-XLN VJG SL/ANHY
11	5936-37	4.4	0.01	12.0	6.9 24.5	2.86	DOLO GY FN-XLN VJG SL/ANHY
12	5937-38	5.7	<0.01	12.7	5.5 41.4	2.83	DOLO GY FN-XLN VJG SL/ANHY
13	5938-39	0.01	<0.01	10.0	5.9 21.9	2.86	DOLO GY FN-XLN VJG SL/ANHY
14	5939-40	6.9	<0.01	12.0	6.0 19.0	2.87	DOLO GY FN-XLN VJG SL/ANHY
15	5940-41	11	<0.01	15.1	9.3 25.8	2.86	DOLO GY FN-XLN VJG SL/ANHY
16	5941-42	1.8	<0.01	8.5	10.4 31.2	2.85	DOLO GY FN-XLN VJG SL/ANHY
17	5942-43	1.1	0.01	7.4	9.2 27.6	2.81	DOLO GY FN-XLN SL/VJG
18	5943-44	0.01	0.01	5.1	0.0 75.0	2.83	DOLO BRN FN-XLN
19	5944-45	0.01	<0.01	4.6	0.0 77.8	2.77	DOLO BRN FN-XLN SL/SHLY
20	5945-46	*	*	(3.5)	0.0 74.3		DOLO BRN FN-XLN SL/SHLY
	5946-5947						SHALE - NO ANALYSIS
	5947-5952						DOLO LM GY FN-XLN - NO ANALYSIS

*SAMPLE NOT SUITABLE FOR ANALYSIS

() SUMMATION OF FLUIDS POROSITY

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CORE LABORATORIES, INC.



Petroleum Reservoir Engineering

COMPANY WEXPRO COMPANY FIELD BUG FILE RP-3-3141
 WELL BUG NO. 13 COUNTY SAN JUAN DATE 10-7-81
 LOCATION NE NW SEC. 17-T36S-R26E STATE UTAH ELEV. 6255' KB

CORE-GAMMA CORRELATION

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VERTICAL SCALE: 5" = 100'

CORE-GAMMA SURFACE LOG

(PATENT APPLIED FOR)

GAMMA RAY

RADIATION INCREASE →

COREGRAPH

TOTAL WATER ———

PERCENT TOTAL WATER

80 60 40 20 0

PERMEABILITY ———

MILLIDARCYs

100 50 10 5 1

POROSITY ———

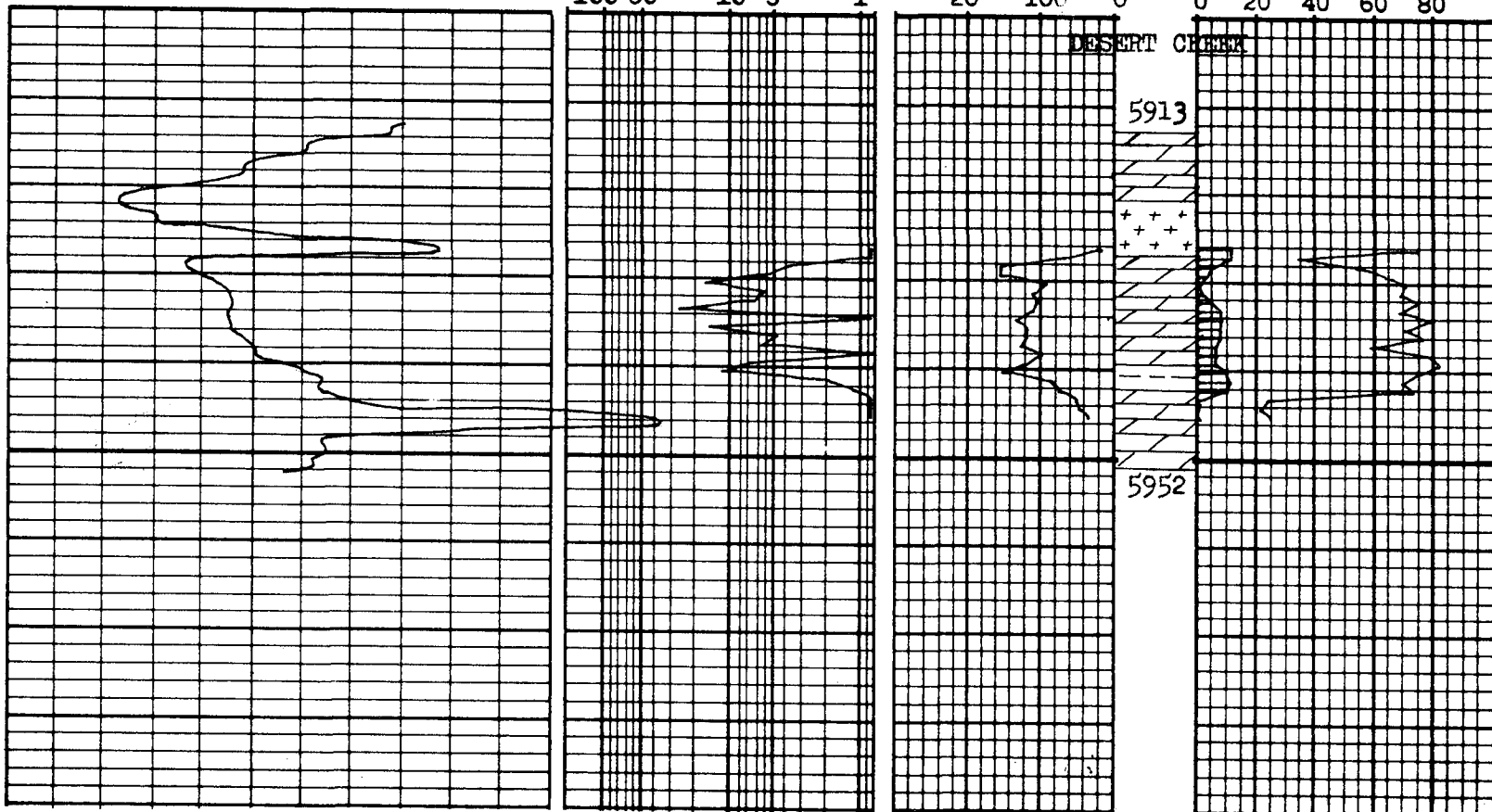
PERCENT

20 100 0

OIL SATURATION ———

PERCENT PORE SPACE

0 20 40 60 80



FORMATION NAME AND DEPTH INTERVAL: Desert Creek - 5928.0-5943.0 Feet

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	15	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	29.8
FEET OF CORE INCLUDED IN AVERAGES	15	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	25 (e)
AVERAGE PERMEABILITY: MILLIDARCYs	7.0	OIL GRAVITY: °API	42 (e)
PRODUCTIVE CAPACITY: MILLIDARCY-Feet	104.9	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT	11.7	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.40 (e)
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	5.8	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	486

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)

(c) Calculated (e) Estimated (m) Measured (*) Refer to attached letter.

INTERPRETATION OF DATA

5928.0-5943.0 Feet - Believed to be oil productive.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

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NOV 03 1981

DEPT. OF
OIL, GAS & MINING

WEXPRO COMPANY

Bug Well No. 13

Section 17, T36S-R26E

San Juan County, Utah

GEOLOGIC REPORT

for

WEXPRO COMPANY

on

BUG WELL NO. 13
Section 17, T36S-R26E
San Juan County, Utah

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Core reports	9
Formation evaluation	10
Lithologic descriptions	12

October 1981

Michael C. Meeker

Michael Meeker
Geologist

WELL DATA SUMMARY

Well Name:	Bug Well No: 13
Operator:	Wexpro Company
Location:	NE, NW, Sec. 17, T36S, R26E
County:	San Juan County
State:	Utah
Area:	Bug Field
Drilling Contractor:	Arapahoe Drilling #4
Elevation:	G.L.: 6260' K.B.: 6274'
Depth Logged:	4100'-6012'
Well Status:	Developmental
Casing Program:	Surface: 9 5/8" (36#, K55) set @ 1652' Production: 5 1/2" (17#, K55)
Mechanical Logs Run:	1. DIL-SP-GR 2. CNL/FDC-Cal-GR 3. Dipmeter-GR
Cores:	Core No. 1 -- Desert Creek Porosity - 5913'-5957'
DST:	DST No. 1 -- Paradox - 5072'-5143'
Mudlogging Company:	Smith Mud Logging Inc.

FORMATION TOPS

<u>FORMATION</u>	<u>PROGNOSIS</u>	<u>SAMPLE</u>	<u>ESTIMATED TOP</u>	<u>E-LOG</u>	<u>SUBSEA LOG</u>
Honaker Trail	4304'	4310'	4308'	4274'	+2000'
Paradox Formation	4999'	4990'	4988'	4968'	+1306'
Upper Ismay	5389'	5380'	5378'	5440'	+834'
Lower Upper Ismay	5649'	5620'	5616'	5624'	+650'
Lower Ismay Shale	5714'	5680'	5674'	5676'	+598'
Lower Ismay Ø	5834'	----	-----	-----	+465'
"B" Zone Shale	5854'	5820'	5809'	5809'	+465'
Desert Creek	5904'	5880'	5870'	5870'	+404'
Lower Bench	5944'	Core	5921'	5921'	+353'
Desert Creek Ø	5954'	Core	5929'	5929'	+345'
Akah	-----	----	-----	5973'	+301'
Salt	6025'	No Sample	6009'	6009'	+265'
T.D.	-----	----	-----	6012'	+262'

DAILY DRILLING SUMMARY

<u>Date</u>	<u>Depth</u>	<u>Progress</u>	<u>Mud Mass</u>	<u>Visc.</u>	<u>W.L.</u>	<u>PH</u>	<u>Activity</u>
9/28	3986	670'	8.5	27	----	9.0	Drilling w/water/Benex
9/29	4622	636'	8.5	27	----	8.4	Drilling
9/30	5143	521'	8.4	27	----	8.8	Circ. & mud up for DST#1
10/1	5143	0	8.9	33	18.4	8.8	DST#1 5072'-5143'
10/2	5282	139'	8.7	33	18.4	8.6	Drilling
10/3	5635	353'	8.9	37	18.8	7.6	Drilling
10/4	5864	229'	12+	43	12.8	10.5	Drilling
10/5	5957	93'	12+	43	12.8	10.5	Laying down Core#1
10/6	6012	55'	12	54	12	11	Running E-Logs

T.D. @ 5:00 p.m. 10/5/81

DEVIATION SURVEYS

Deviation surveys after surface casing

<u>DEPTH</u>	<u>SURVEY</u>	<u>CHANGE</u>
277	$3/4^{\circ}$	$+3/4^{\circ}$
929	$1/4^{\circ}$	$-1/2^{\circ}$
1680	$1/4^{\circ}$	0
4935	1°	$+3/4^{\circ}$

BIT RECORD

OIL CO.: Wexpro Company WELL NAME: Bug Well No. 13 LOCATION NO: NE,NW,Sec. 17, T36S, R26E

CONTRACTOR: Arapahoe RIG #: 4 County San Juan STATE Utah

RIG MAKE & MODEL: _____ SURF CSG: 9 5/8" @ 1652' INT. CSG: _____ PROD CSG: _____

NO 1 PUMP, MAKE & MODEL: _____ SPUD DATE: 9/20/81 G.L.: 6260'

NO 2 PUMP, MAKE & MODEL: _____ T.D. DATE: 10/5/81 K.B.: 6274'

[illegible]

LOGGING REPORTDATE: 10/5/81Logging Co.: Schlumberger Logging Engineer: Pete Lewand Truck No.: _____Depth (Driller's): 6012' Depth (Strap): 6012' Depth (Loggers): 6012'Hole Size: 8 3/4 Casing (Drillers): 1652 Intermediate Casing (Drillers): _____

Mud details:

Mud Type: LSND Wt.: 12 Vis: 54 pH: 11 w.l.: 12Salinity at time of logging: 900 (ppm-chlorides)Hole conditions prior to logging: Hole appears to be in good conditionOperations summary:- Circ. time after T.D. (hrs) 2, No. of "Dummy Trips" none

Description of dummy trips: _____

Hours logging: 11 hours

Logging Sequence:

Logs	Time Spent in hours	Remarks
1. DIL	2 1/2	
2. CNL-FDC	2 1/2	
3. Dipmeter	3 1/2	

No of runs in hole: Total 3 Succeeded: 3 Failed: 0

Further Remarks: _____

DRILL STEM TEST REPORT

7

Test No. & Interval: #1 Paradox 5072'-5143'-71' Date 9/30/81 Wed.Well Name & Location: Bug Well No. 13 NE,NW,Sec. 17, T36S, R26EFormation: Paradox Hole Size 8 3/4"Test Type: Conventional Bottom Hole Testing Co.: Johnston MaccoMud Properties: Mud Wt: 8.9 Vls: 33 PH -----Water Loss 18.4Water Cushion (If any) noneTimes & Pressures:Time & Date Tool opened: 2:32 a.m. 10/1/81Prewflow: 30 mins. 83 psi F.S.T. 180 mins. 1911 psiI.S.I.: 90 mins. 1974 psi I.H. ----- 2343 psiI.F.: ----- mins. 159 psi F.H. ----- 2264 psi** see chart
readings
belowF.F. 90 mins. 172 psiBottom Hole Temperature, 130 °F. est.Recovery & Description:Blow on Prewflow: No blow throughout preflowGas/Fluid to surface: GTS Immediately @ 2nd FF opening @ 79 psiType of flow during valve open (flow period): flow leveled out @ 120 MCFFluid Recovered: 205' of slightly gas cut mud 38 min. into FFSamples: Quantity: 5 spl

Shipped to: _____

Shipped by: Johnston MaccoTop(5073') Bottom(5132')

**	Resis.	Chlorides
Mud	<u>1.1n</u>	<u>.4%</u>
spl	<u>1.9n</u>	<u>.8%</u>
top		
middle		
bottom		

I.H.P.	2289	2343
1st I.F.	85	83
1st F.F.	97	108
I.S.I.	1932	1974
2nd I.F.	72	83
2nd F.F.	263	298
2nd S.I.	1932	1962
3rd I.F.	148	159
3rd F.F.	161	172
F.S.I.	1907	1911
F.H.P.	2264	2292

Page 2

TEST No. 1 Well Name Bug Well No. 13

Flow Measurements & Closed Chamber Data (if any):

[illegible]

Remarks: (reason for test failure, abnormalities on charts, water salinity (ppm) etc.)

1. Johnston Macco neglected to open test head valve so at end of FSI we ran another 90 min. flow period followed by a 180 min. shut in period.

CORE REPORTS

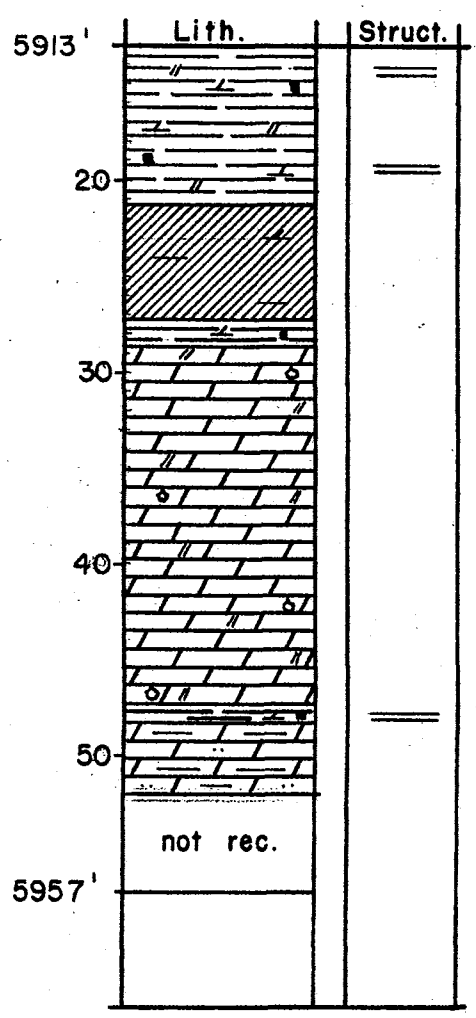
Core #1 5913'-5957'

Desert Creek Porosity

October 5, 1981

Cut: 44' Recovered: 39'

Coring Company: Christensen



Scale: 1" = 10'

Description:

5913' - 5921' Shale: Light to medium gray, occasional medium to dark gray, slightly to very dolomitic and grading to argillaceous dolomite in parts, occasional carbonaceous material, slightly micro-micaceous, firm to very firm, some dense, laminated with anhydritic shale deposits throughout.

5921' - 5927' Anhydrite: Medium gray brown, mottled, dolomitic in parts, amorphous, occasionally fibrous, dense to very dense, firm to hard, occasionally slightly argillaceous in parts.

5927' - 5928' Shale: Dark gray, subfissile to fissile, very dolomitic, carbonaceous, firm to very firm in part, very micro-micaceous.

5928' - 5943' Dolomite: Light to medium brown, predominantly microcrystalline, microcrystalline in parts, fair to good vuggy pinpoint and leached algal mound porosity, some tight, average porosity in 8-12% range, some fine crystalline dolomite with fair to good inter-crystalline porosity, some porosity infilled with anhydrite, euhedral crystals lining porosity space, abundant black dead asphaltic material infilling porosity in upper section, vugs as large as 1-1.5cm, becoming less porous toward the base, Brachiopod casts found throughout, abundant black dead asphaltic material in upper section (5920'-5939') with no observable fluorescence or stain and a moderately weak hydrocarbon odor on breaks, patchy green yellow fluorescence and fair to good residual cuts with minor light brown spotty oil stain and fair to good green yellow streaming cuts from 5939' to base of porosity, strong hydrocarbon odor on breaks, possible oil/gas contact at approximately 5939'.

5943' - 5952' Dolomite: Light to occasionally medium gray brown, microcrystalline, dense, firm to hard, slightly argillaceous to very argillaceous in parts, slightly micromicaceous, some slightly silty, no visible porosity, tight, no stain, fluorescence, odor or cut, a minor thin carbonaceous and slightly dolomitic sub-fissile shale interbedded at approximately 5947'-5948', minor fracturing at base of core.

FORMATION EVALUATION

I began geologic responsibility on September 28, 1981, for the Wexpro Company, Bug Well No. 13 in Section 17, T36S, R26E. When I arrived on location we were drilling in the interbedded reddish orange sands and shales of the Permian Cutler Formation. They were drilling with water and did not fully mud up the system until just prior to DST #1 at 5,143', so general sample quality was poor to very poor through the upper section of the well.

Honaker Trail Formation: Hermosa Group, Upper Pennsylvanian
4274-4968' (E-logs)

The transition from the Permian deposits of the Cutler to the Pennsylvanian deposits of the Honaker Trail was a very gradual one and was made more difficult to see by the poor sample quality. The top of the Honaker Trail was identified by the introduction of the massive limestones and change in the color of the shales from those of the Cutler.

The Honaker Trail consisted of a thick interbedded sequence of limestones, shales, and occasional thick massive sandstones. The limestones were all visibly tight and the sandstone porosities were difficult to determine due to their unconsolidated nature. No mud gas or sample shows were observed in this marine sequence.

Conclusion: Zone is of little or no economic interest locally due to the absence of hydrocarbon shows.

Paradox Formation: Hermosa Group, Pennsylvanian
4968-6012' (E-logs)

The Paradox Formation is an evaporite facies in the Hermosa Group and developed in a restricted marine environment. This zone consisted of a thick alternating sequence of limestones, shales, anhydrites, and occasionally massive sandstones. One such massive sandstone was encountered and drill stem tested from 5072-5143' with the recovery of 205' of slightly gas cut mud and gas flowing at approximately 120 MCFPD.

The Upper Ismay zone was identified by the introduction of a very argillaceous medium to dark grayish brown limestone which was grading to a marlstone and was penetrated at 5440' according to the E-log profile. The shales of this interval were of similar composition and color except toward the base where they became dark gray to black, very calcareous, and carbonaceous. One mud gas show was recorded from this interval from apparently a relatively tight limestone. This zone is of little or no interest.

The Lower Upper Ismay zone was picked at the base of the carbonaceous shale described above and consisted of a tight limestone with an underlying thick very fine to fine grained dolomite exhibiting fair to good intercrystalline porosity and no observable fluorescence. A 40 unit mud gas show was noted from this zone. This zone is of some interest due to substantial mud gas show from the porous dolomite described above which may require a drill stem test to fully realize its potential.

The Lower Ismay shale zone was penetrated at 5676' and consisted of a thick interval of dark grayish brown, calcareous, and occasionally silty shale with an underlying thick, tight limestone. A minor mud gas show was noted at the top of this limestone but generally is of no economic interest locally.

The "B" Zone shale was encountered at 5809' and consisted of a dark gray to black calcareous and carbonaceous shale. This interval serves as a good marker bed and is of no economic interest except as a potential source bed.

The Desert Creek zone was picked at the base of the shale described above and at the top of a very silty limestone which was grading to a calcareous siltstone. An underlying thick anhydrite was followed by a dark gray to black and dark gray-brown calcareous and carbonaceous shale. No mud gas shows were observed from this interval and it is a zone of little or no economic interest.

The Lower Bench zone was picked up from Core #1 at 5921' at the base of the Desert Creek shale and at the top of an anhydrite.

The Desert Creek Porosity was also picked from Core #1 and encompassed almost a 15' interval from 5929-5943'. See Core #1 description. A minor mud gas increase was noted through this interval but the good porosity coupled with the hydrocarbon shows from the core suggests that this zone has good economic potential. It was the opinion of this observer that a possible oil/gas contact exists at approximately 5939' based on preliminary analysis of the core.

The Akah was picked at 5973' from the E-logs and the salt was encountered at 6009' which we penetrated 3' into for total depth of Bug Well No. 13.

Lithologic Descriptions

Drilling with water/Benex; sample quality poor to very poor

4100-4110	40%	<u>Shale</u> - red-orange, light orange, green, gray in parts, blocky, firm, some silty and very silty, slightly calcareous in parts
	60%	<u>Sandstone</u> - predominantly unconsolidated, very fine to medium quartzitic grain, clear to translucent, occasionally light orange, angular to subrounded, occasionally rounded, minor consolidation, very fine argillaceous sand grading to siltstone, questionable porosity, no shows, cuts, fluorescence Trace anhydrite
4110-4120	60%	<u>Shale</u> - as above, red-brown in parts, occasional slightly micro-micaceous
	40%	<u>Sandstone</u> - as above, becoming more consolidated as above, predominantly light orange, rare medium to coarse unconsolidated quartzitic grain Trace limestone
4120-4130	60%	<u>Shale</u> - as above, red-orange, green-gray, rare medium brown
	40%	<u>Sandstone</u> - as above Trace limestone
4130-4140	50%	<u>Shale</u> - as above
	50%	<u>Sandstone</u> - as above, becoming predominantly very fine to fine grained, consolidated sand, occasional unconsolidated sand as above, argillaceous Trace limestone
4140-4150	40%	<u>Shale</u> - as above
	60%	<u>Sandstone</u> - predominantly unconsolidated, very fine to medium quartzitic grain, clear to translucent, light orange in parts, angular to subrounded, occasionally rounded, questionable porosity, no shows, cuts, fluorescence Trace limestone - buff to light gray, occasionally white, crypto to microcrystalline, occasionally chalky, soft to hard
4150-4160	30%	<u>Shale</u> - red-orange, light orange, green-gray, blocky, firm, silty to very silty in parts, some slightly calcareous
	70%	<u>Sandstone</u> - as above, unconsolidated, quartzitic grain as above with influx of light orange to red-orange, very fine to occasionally fine grained, consolidated, argillaceous sand Trace limestone
4160-4170	30%	<u>Shale</u> - as above, some very micro-micaceous
	70%	<u>Sandstone</u> - as above, cherty in parts Trace limestone - as above, light orange in parts
4170-4180	30%	<u>Shale</u> - as above
	70%	<u>Sandstone</u> - as above Trace limestone - as above, predominantly chalky

4180-4190	40%	<u>Shale</u> - as above
	50%	<u>Sandstone</u> - as above
	10%	<u>Limestone</u> - buff, white, light brown, predominantly earthy, microcrystalline to microsucrosic in parts, moderately soft to firm, tight, no shows, cuts, fluorescence, or odor
4190-4200	40%	<u>Shale</u> - light orange to red orange, green gray in parts, rare light medium gray, blocky, firm, occasionally slightly silty
	60%	<u>Sandstone</u> - predominantly fine to medium unconsolidated quartzitic grain, clear to translucent, light orange, angular to sub rounded, rounded in parts, slightly chalky, questionable porosity, no shows, cuts, fluorescence
		Trace limestone - as above, predominantly light orange
4200-4210	80%	<u>Sandstone</u> - as above
	20%	<u>Shale</u> - as above
		Trace limestone
4210-4220	80%	<u>Sandstone</u> - as above
	20%	<u>Shale</u> - as above
		Trace limestone - predominantly buff to white, chalky, soft
4220-4230	70%	<u>Sandstone</u> - as above
	20%	<u>Shale</u> - as above
	10%	<u>Limestone</u> - buff to white, light orange, microcrystalline, earthy to chalky, soft to firm, tight, no shows, cuts, fluorescence
		Trace anhydrite - white, chalky, soft
4230-4240	90%	<u>Sandstone</u> - as above
	10%	<u>Shale</u> - as above, light orange to red orange, green gray and light gray in parts
		Trace limestone - as above
4240-4250	60%	<u>Sandstone</u> - as above, rare well rounded grain
	30%	<u>Shale</u> - as above
	10%	<u>Limestone</u> - as above
4250-4260	80%	<u>Sandstone</u> - as above, occasionally very fine gray argillaceous consolidated sand
	20%	<u>Shale</u> - as above - predominantly red-orange, and green-gray
		Trace limestone
4260-4270	90%	<u>Sandstone</u> - predominantly very fine to occasionally medium unconsolidated quartzitic grain, clear to translucent, light orange, subangular to subrounded, slightly chalky, questionable porosity, some consolidated light orange to red orange, very fine grained, argillaceous sand, no shows, cuts, fluorescence
	10%	<u>Shale</u> - light orange to red orange, light gray, blocky, firm, some very micro-micaceous, some silty to very silty, dense in parts
		Trace limestone

4270-4280 30% Shale - as above, occasionally red brown, medium brown in parts, rare subfissile
 70% Sandstone - as above
 Trace limestone - light orange, buff, light brown, micro to cryptocrystalline, rare earthy, firm, abundant bit fillings

HONAKER TRAIL 4274'

4280-4290 30% Shale - as above
 70% Sandstone - as above
 Trace limestone - as above

Abundant bit fillings

4290-4300 60% Shale - as above, becoming more light gray and green-gray in parts
 30% Sandstone - as above
 10% Limestone - buff to light gray, light orange in parts, microcrystalline to microsucrosic, firm to hard, occasionally dense, tight, no shows, cuts, fluorescence, or odor

4300-4310 50% Sandstone - as above
 30% Shale - as above
 20% Limestone - buff to white, light gray and light orange in parts, microcrystalline, microsucrosic, firm to hard, some dense, no dead oil stain porosity, no shows, cuts, fluorescence, odor

TOP HONAKER TRAIL

4310-4320 40% Limestone - as above, white and subearthy in parts
 20% Shale - red orange, red brown, light gray in parts, minor variegated shale, blocky, firm, very silty and grading to siltstone in parts, slightly calcareous in parts
 30% Siltstone - light orange to red orange, argillaceous, firm, calcareous, occasionally very fine grained sand, slightly cherty, some micro-micaceous
 10% Sandstone - predominantly fine to medium unconsolidated quartzitic grain, clear to translucent, occasionally light orange, angular to subrounded, questionable porosity, no shows, cuts, fluorescence, or odor

4320-4330 40% Limestone - as above, buff to light brown in parts
 20% Shale - as above
 30% Siltstone - as above
 10% Sandstone - as above

4330-4340 70% Sandstone - clear to translucent, light orange, fine to medium unconsolidated quartzitic grain, angular to subrounded, moderately soft, porosity uncertain, no shows, cuts, fluorescence, odor
 20% Limestone - as above
 10% Shale - as above
 Trace siltstone - as above

4340-4350	70%	<u>Sandstone</u> - clear to translucent, light orange, fine to medium unconsolidated quartzitic grain, angular to subrounded, moderately soft, porosity uncertain, no shows, cuts, odor, or fluorescence
	20%	<u>Limestone</u> - as above
	10%	<u>Shale</u> - as above
		Trace siltstone - as above
		Samples are extremely fine in size due to dullness of bit
4350-4360	50%	<u>Sandstone</u> - as above, becoming predominantly fine grained, and unconsolidated as above
	30%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - as above
		Trace siltstone
4360-4370	80%	<u>Shale</u> - red orange, green gray, red brown and light gray in parts, blocky, occasionally subwaxy, firm, calcareous to very calcareous in parts, some very silty, slightly micro-micaceous in parts
	10%	<u>Limestone</u> - light orange, occasionally buff, microcrystalline to microsucrosic, firm to hard, slightly argillaceous in parts, tight, no shows, cuts, fluorescence, or odor
	10%	<u>Sandstone</u> - as above
4370-4380	80%	<u>Shale</u> - as above, red brown and medium brown in parts, occasionally marly, some grading to siltstone
	20%	<u>Siltstone</u> - light orange, red orange, argillaceous, slight to very calcareous, some micro-micaceous, slightly cherty
		Trace limestone
4380-4390	70%	<u>Shale</u> - as above
	20%	<u>Limestone</u> - as above
	10%	<u>Siltstone</u> - as above
		Trace sandstone
4390-4400	50%	<u>Shale</u> - as above abundant, light gray and green gray, rare subfissile
	20%	<u>Limestone</u> - as above
	10%	<u>Siltstone</u> - as above
	20%	<u>Sandstone</u> - predominantly unconsolidated fine to medium quartzitic grain, clear to translucent, light orange, angular to subrounded, porosity uncertain, no shows, cuts, odor, or fluorescence
4400-4410	60%	<u>Limestone</u> - buff, light gray, white, light orange in parts, microcrystalline, microsucrosic in parts, firm to hard, rare slightly argillaceous, tight, no shows, cuts, fluorescence, odor
	20%	<u>Sandstone</u> - as above, rare medium to coarse grained, sub-rounded to rounded
	10%	<u>Shale</u> - as above
	10%	<u>Siltstone</u> - as above

4410-4420	60%	<u>Limestone</u> - as above
	20%	<u>Sandstone</u> - as above
	10%	<u>Shale</u> - as above
	10%	<u>Siltstone</u> - as above
4420-4430	60%	<u>Limestone</u> - as above, occasional fine to medium crystalline, light gray to brown
	10%	<u>Sandstone</u> - as above
	10%	<u>Shale</u> - as above
	20%	<u>Siltstone</u> - as above
4430-4440	30%	<u>Limestone</u> - as above
	50%	<u>Shale</u> - as above
	10%	<u>Siltstone</u> - as above
	10%	<u>Sandstone</u> - as above
4440-4450	60%	<u>Limestone</u> - buff to light gray, light brown, light orange in parts, microcrystalline to microcrystalline, occasionally subearthy rare cryptocrystalline, soft to hard, tight, no shows, cuts, fluorescence, or odor
	20%	<u>Sandstone</u> - predominantly fine to medium unconsolidated quartzitic grain, clear to translucent, occasionally light orange, subangular to rounded, moderately sorted, porosity uncertain, trace black dead bitumen, no shows, cuts, odor fluorescence
	20%	<u>Siltstone</u> - red orange, argillaceous, firm, slight to moderately calcareous in parts, slightly cherty, occasionally very finely grained sand, micro micaceous in parts
		Trace shale
4450-4460	70%	<u>Limestone</u> - as above, white in parts
	10%	<u>Sandstone</u> - as above, occasionally medium to coarse grained as above
	20%	<u>Siltstone</u> - as above
		Trace shale - red-orange, light gray, some varigated, firm, occasionally very silty, slightly micro-micaceous in parts, some very sandy
4460-4470	30%	<u>Shale</u> - as above, predominantly red-orange with influx of fair abundant light gray subwaxy sandy shale
	40%	<u>Limestone</u> - as above, light to medium brown in parts, trace bioclastic
	20%	<u>Siltstone</u> - as above
	10%	<u>Sandstone</u> - as above
4470-4480	50%	<u>Limestone</u> - as above, trace bioclastic
	20%	<u>Sandstone</u> - as above
	20%	<u>Shale</u> - as above, light to medium gray and very micaceous in parts
	10%	<u>Siltstone</u> - as above

4480-4490	40%	<u>Limestone</u> - white to light gray, light brown in parts, crypto to microcrystalline, microsucrosic in parts, occasionally earthy, moderately soft to hard, some dense, occasionally Inoceramus fragments, occasional other bioclastic, tight, no shows, cuts, fluorescence, or odor
	30%	<u>Shale</u> - red orange, green gray to medium gray in parts, occasionally medium brown and very micro-micaceous, blocky firm, some subwaxy, trace pyrite
	20%	<u>Sandstone</u> - predominantly fine to medium unconsolidated quartzitic grain, clear to translucent, light orange in parts, angular to subrounded, occasionally rounded, moderately to well sorted, porosity uncertain, no shows, cuts, fluorescence, odor
	10%	<u>Siltstone</u> - red orange, argillaceous, firm, slightly cherty, occasionally slightly calcareous, micro-micaceous, some with abundant biotite
4490-4500	40%	<u>Limestone</u> - as above
	30%	<u>Shale</u> - as above, pale apple green in parts
	10%	<u>Sandstone</u> - as above
	20%	<u>Siltstone</u> - as above
4500-4510	40%	<u>Shale</u> - as above, occasionally red brown
	40%	<u>Limestone</u> - as above, predominantly crypto to microcrystalline
	10%	<u>Sandstone</u> - as above
	10%	<u>Siltstone</u> - as above
4510-4520	70%	<u>Limestone</u> - as above, predominantly white, crypto to microcrystalline, earthy in parts, rare crinoidal
	20%	<u>Shale</u> - as above, some very silty and grading to siltstone
	10%	<u>Sandstone</u> - as above, influx of minor very fine to fine grained consolidated quartzitic sand with occasional glauconite
4520-4530	60%	<u>Limestone</u> - as above
	30%	<u>Shale</u> - as above, minor variegated shale
	10%	<u>Sandstone</u> - as above
4530-4540	70%	<u>Limestone</u> - as above, no recognizable bioclasts
	20%	<u>Shale</u> - as above
	10%	<u>Sandstone</u> - as above
4540-4550	60%	<u>Limestone</u> - white, buff to light gray, crypto to microcrystalline, microsucrosic, occasionally earthy in parts, moderately soft to hard, tight, no shows, cuts, fluorescence, or odor
	40%	<u>Shale</u> - red orange, green gray, light to occasionally medium gray in parts, blocky, some subwaxy, firm, occasionally silty, grading to siltstone
		Trace sandstone - predominantly unconsolidated fine to medium quartzitic grain, as above
4550-4560	60%	<u>Limestone</u> - as above, occasionally light to medium gray-brown
	40%	<u>Shale</u> - as above
		Trace sandstone - as above

4560-4570	70%	<u>Limestone</u> - as above
	30%	<u>Shale</u> - as above, rare medium to dark gray, and very micaceous
		Trace sandstone
4570-4580	70%	<u>Limestone</u> - as above, trace bioclastic
	30%	<u>Shale</u> - as above
		Trace sandstone
4580-4590	70%	<u>Limestone</u> - as above
	30%	<u>Shale</u> - as above, rare micropyrritic
		Trace sandstone
4590-4600	60%	<u>Limestone</u> - as above
	40%	<u>Shale</u> - as above
		Trace sandstone
4600-4610	60%	<u>Limestone</u> - buff to light gray, occasionally white, light brown, crypto to microcrystalline, microsucrosic and earthy in parts, moderately soft to hard, no visible porosity, no shows, cuts, fluorescence, or odor
	40%	<u>Shale</u> - red orange, green gray to medium gray, pale apple green in parts, blocky, some subwaxy, occasionally silty to very silty
		Trace sandstone
4610-4620	60%	<u>Limestone</u> - as above
	40%	<u>Shale</u> - as above
		Trace sandstone
4620-4630	50%	<u>Limestone</u> - as above
	50%	<u>Shale</u> - as above, micro-micaceous in parts, grading to siltstone in parts
		Trace sandstone
4630-4640	60%	<u>Shale</u> - as above, medium brown and very micro-micaceous in parts
	40%	<u>Limestone</u> - as above, trace dark brown chert
		Trace sandstone - as above
4640-4650	60%	<u>Shale</u> - as above
	40%	<u>Limestone</u> - as above
		Trace sandstone - as above
4650-4660	70%	<u>Shale</u> - as above
	30%	<u>Limestone</u> - as above, rare dark brown
		Trace sandstone - as above Trace pyrite
4660-4670	90%	<u>Shale</u> - red orange, green gray to medium gray, occasionally medium brown, blocky, soft to firm, some subwaxy, occasionally marly, occasionally silty and sandy
	10%	<u>Limestone</u> - as above
		Trace sandstone - as above

4670-4680	80%	<u>Shale</u> - as above
	10%	<u>Limestone</u> - as above, predominantly white, buff to light gray, microcrystalline, earthy
	10%	<u>Sandstone</u> - predominantly fine to medium unconsolidated quartzitic grain, clear to translucent, rare light orange, angular to subrounded, porosity uncertain, no shows, cuts, fluorescence, or odor
4680-4690	80%	<u>Sandstone</u> - fine to medium unconsolidated quartzitic grain, clear to translucent, angular to subrounded, rare rounded, porosity & cement uncertain, trace black dead bitumen
	10%	<u>Limestone</u> - predominantly buff to light gray, light brown and white in parts, microcrystalline, cryptocrystalline in parts, firm to hard, some dense, tight, no shows, cuts, fluorescence, odor
	10%	<u>Shale</u> - as above
4690-4700	60%	<u>Sandstone</u> - as above, rare medium to coarse angular grain
	20%	<u>Shale</u> - as above
	20%	<u>Limestone</u> - as above
4700-4710	30%	<u>Sandstone</u> - as above
	20%	<u>Limestone</u> - buff to light gray, light brown, occasionally white, crypto to microcrystalline, occasionally earthy and microsucrosic, moderately soft to hard; dense in parts, no visible porosity, no shows, cuts, fluorescence, or odor
	50%	<u>Shale</u> - red orange, green gray, red brown and light gray in parts, blocky, some subwaxy, occasionally very silty and grading to siltstone, micro-micaceous in parts, some marly
4710-4720	30%	<u>Sandstone</u> - predominantly fine to medium unconsolidated quartzitic grains, occasionally very fine grained, clear to translucent, rare light orange, angular to subrounded, occasionally rare minor black dead bitumen, porosity uncertain, no shows, cuts, fluorescence, or odor
	40%	<u>Limestone</u> - as above
	30%	<u>Shale</u> - as above
4720-4730	50%	<u>Shale</u> - as above
	40%	<u>Limestone</u> - as above
	10%	<u>Sandstone</u> - as above
4730-4740	40%	<u>Sandstone</u> - as above
	30%	<u>Limestone</u> - as above
	30%	<u>Shale</u> - as above, occasionally very sandy and silty
4740-4750	30%	<u>Sandstone</u> - as above
	40%	<u>Limestone</u> - as above
	30%	<u>Shale</u> - as above
4750-4760	20%	<u>Sandstone</u> - as above
	50%	<u>Shale</u> - as above
	30%	<u>Limestone</u> - as above

4760-4770	40%	<u>Shale</u> - red orange, medium brown, very micaceous, green-gray to light gray in parts, predominantly very silty and grading to siltstone, blocky, some subwaxy, some sandy to very sandy
	30%	<u>Siltstone</u> - red orange, medium brown, argillaceous, firm, some sandy and grading to very fine grained sand in parts, some calcareous, occasionally very micro-micaceous
	30%	<u>Limestone</u> - buff to light gray, light brown, white in parts, crypto to microcrystalline, occasionally earthy, moderately soft to hard, tight, no shows, cuts, fluorescence, or odor Trace sandstone
4770-4780	50%	<u>Shale</u> - as above
	20%	<u>Siltstone</u> - as above
	30%	<u>Limestone</u> - as above Trace sandstone
47890-4790	60%	<u>Shale</u> - as above
	40%	<u>Limestone</u> - as above Trace siltstone - as above Trace sandstone - as above
4790-4800	90%	<u>Shale</u> - red orange, green gray, occasionally light to medium gray, blocky, some subwaxy, firm, occasionally silty and micro-micaceous, minor varigated shale
	10%	<u>Limestone</u> - buff to light gray, light brown, crypto to micro-crystalline, earthy in parts, moderately firm to hard, tight, no shows, cuts, fluorescence, or odor Trace sandstone
4800-4810	90%	<u>Shale</u> - as above
	10%	<u>Limestone</u> - as above Trace sandstone
4810-4820	80%	<u>Shale</u> - as above, some light gray and sandy
	20%	<u>Limestone</u> - as above Trace sandstone
4820-4830	70%	<u>Shale</u> - as above
	30%	<u>Limestone</u> - as above Trace sandstone
4830-4840	70%	<u>Shale</u> - as above
	30%	<u>Limestone</u> - as above, occasionally white, microsucrosic in parts Trace sandstone
4840-4850	70%	<u>Shale</u> - as above, abundant green gray to light gray
	30%	<u>Limestone</u> - as above Trace sandstone
4850-4860	70%	<u>Shale</u> - as above, pale apple green and medium brown in parts
	30%	<u>Limestone</u> - as above Trace sandstone

4860-4870	40%	<u>Limestone</u> - buff to light gray, white in parts, crypto to microcrystalline, microsugrosic, firm to hard, occasionally dense, tight, no shows, cuts, fluorescence, or odor
	50%	<u>Shale</u> - red orange, light gray, green gray, medium brown, blocky, firm, some micro-micaceous
	10%	<u>Sandstone</u> - predominantly fine to medium unconsolidated quartzitic grain, occasionally very fine to fine grained, clear to translucent, light orange in parts, angular to subrounded, some rounded, porosity uncertain, no shows, cuts, fluorescence, odor
4870-4880	90%	<u>Sandstone</u> - very fine to fine and occasionally medium unconsolidated quartzitic grain, clear to translucent, angular to subrounded, moderately to well sorted, trace black dead bitumen, porosity uncertain, no shows, cuts, fluorescence, odor
	10%	<u>Shale</u> - as above, predominantly red orange and light gray
		Trace limestone - as above
4880-4890	80%	<u>Sandstone</u> - as above, very fine to medium grained
	20%	<u>Shale</u> - as above, occasionally light apple green
		Trace limestone
4890-4900	60%	<u>Sandstone</u> - as above, rare well rounded grain
	20%	<u>Shale</u> - as above
	20%	<u>Limestone</u> - as above
4900-4910	80%	<u>Sandstone</u> - as above
	10%	<u>Shale</u> - as above
	10%	<u>Limestone</u> - as above
4910-4940 - caught after trip at 4935'		
	80%	<u>Sandstone</u> - as above
	10%	<u>Limestone</u> - as above
	10%	<u>Shale</u> - as above
4940-4950	80%	<u>Sandstone</u> - very fine to fine grained, occasionally fine to medium grained, predominantly unconsolidated quartzitic grain, some consolidated with light orange, calcareous clay cement, subangular to sub rounded, moderately to well sorted, friable, probable good porosity, no shows, cuts, fluorescence, or odor
	10%	<u>Limestone</u> - buff to light gray, occasionally white, crypto to microcrystalline, occasionally earthy, soft to firm, tight, no shows, cuts, fluorescence, or odor
	10%	<u>Shale</u> - predominantly red orange and green gray
4950-4960	60%	<u>Sandstone</u> - as above
	20%	<u>Limestone</u> - as above, light brown in parts
	20%	<u>Shale</u> - as above, pale green gray and red brown to medium brown in parts, some minor variegated shale

4960-4970	40%	<u>Sandstone</u> - as above
	40%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - as above
PARADOX 4968'		
4970-4980	60%	<u>Shale</u> - red orange, light green gray, subwaxy, occasionally medium brown, very micro-micaceous, blocky, silty in parts, some sandy, firm
	20%	<u>Sandstone</u> - as above, influx of minor very fine to fine grained consolidated quartzitic sand with trace glauconite
	20%	<u>Limestone</u> - as above
4980-4990	50%	<u>Shale</u> - as above, predominantly buff to light brown, light gray
	30%	<u>Sandstone</u> - as above, occasionally fine to medium rounded grain
	20%	<u>Limestone</u> - as above, predominantly buff to light brown, occasionally white
TOP PARADOX		
4990-5000	50%	<u>Shale</u> - as above, predominantly light green gray and red orange
	30%	<u>Limestone</u> - as above, occasionally light to medium brown and dark brown in parts, some argillaceous to very argillaceous grading to marlstone
	20%	<u>Sandstone</u> - as above, predominantly fine to medium unconsolidated grain
5000-5010	70%	<u>Shale</u> - as above, occasionally light to medium gray in parts
	30%	<u>Limestone</u> - as above, trace bioclastic Trace sandstone
5010-5020	60%	<u>Limestone</u> - buff to light brown, white, medium to dark brown in parts, microcrystalline, microsugrosic, occasionally cryptocrystalline, firm, abundant, very argillaceous limestone, grading to marlstone as above and very micro-micaceous tight, no shows, cuts, fluorescence, or odor
	40%	<u>Shale</u> - red orange, light green gray, blocky, occasionally subwaxy, firm, some silty
5020-5030	60%	<u>Limestone</u> - as above
	40%	<u>Shale</u> - as above, light to medium gray in parts
5030-5040	80%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - as above
5040-5050	80%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - as above
5050-5060	80%	<u>Limestone</u> - as above, predominantly medium to dark brown
	20%	<u>Shale</u> - as above

5060-5070	70%	<u>Limestone</u> - medium to dark brown, occasionally light brown and white, microcrystalline, occasionally fine crystalline, predominantly very argillaceous, micro-micaceous, marly, firm, tight, no shows, cuts, fluorescence, or odor
	30%	<u>Shale</u> - light green gray, light gray and red orange in parts, blocky, subwaxy, firm, sandy
5070-5080	80%	<u>Limestone</u> - as above, medium to dark brown, buff to light brown
	20%	<u>Shale</u> - as above Trace sandstone
5080-5090	80%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - as above Trace sandstone
5090-5100	80%	<u>Limestone</u> - as above, more abundant buff to light brown, white, than above, trace bioclastic, no shows, cuts, fluorescence, odor
	20%	<u>Shale</u> - as above Trace sandstone
5100-5110	90%	<u>Limestone</u> - as above, microsucrosic in parts, rare crypto-crystalline, occasionally bioclastic, no shows, cuts, fluorescence
	10%	<u>Shale</u> - as above Trace sandstone
5110-5120	60%	<u>Sandstone</u> - fine to medium unconsolidated quartzitic grain, clear to translucent, some light orange, angular to sub-rounded, well sorted, very minor consolidated sand with apparent pale green clay cement, porosity uncertain, no shows, cuts, fluorescence, or odor
	40%	<u>Limestone</u> - medium to dark brown and buff to light brown, some white, microcrystalline, microsucrosic, very argillaceous and marly in parts, very micro-micaceous in parts, tight, no shows, cuts, fluorescence or odor Trace shale
5120-5130	50%	<u>Sandstone</u> - as above
	30%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - light gray, red orange, occasionally light gray, minor medium lavender, blocky, subwaxy, firm
5130-5140	60%	<u>Limestone</u> - as above, less argillaceous than above, rare chalky, some mica, trace pale mineral fluorescence
	30%	<u>Sandstone</u> - as above
	10%	<u>Shale</u> - light gray, red orange in parts, subwaxy, blocky, firm
5140-5150	60%	<u>Limestone</u> - buff to light brown, medium to dark brown and white in parts, crypto to microcrystalline, occasionally microsucrosic, firm to hard, some very argillaceous and marly, occasional fossiliferous, minor pyrite, tight, no shows, cuts, fluorescence
	30%	<u>Sandstone</u> - as above
	10%	<u>Shale</u> - green gray, red orange, blocky, subwaxy, some sandy, some slightly marly

Trip for DST #1 5065-5143'; mudded up so sample quality is greatly improved
Abundant pipe dope and LCM

5150-5160 100% Limestone - buff to light gray, light gray-brown, as above, predominantly fine to medium crystalline and microcrystalline, occasionally earthy, moderately soft to firm, some sandy, occasional biotite flakes, tight, no shows, cuts, fluorescence, odor
Trace shale - as above, predominantly green gray

5160-5170 100% Limestone - as above, light to medium brown, occasionally slightly argillaceous in parts, rare stylolite with argillaceous limestone on face, rare bioclasts
Trace shale - light gray, occasionally green gray, red orange, cavings as above, blocky, subwaxy

Minor pipe dope and LCM

5170-5180 90% Limestone - as above, mottled in part, slightly fossiliferous minor fractures

10% Sandstone - clear, occasional fine to medium grained, occasionally very fine grained, siliceous and bluish green clay cement, slightly calcareous, cherty, minor glauconite
Trace shale - buff to light gray, subwaxy, moderately soft, very sandy

5180-5190 100% Limestone - as above, more light to medium brown than above, occasional dark brown, micro micaceous, occasionally argillaceous in part
Trace shale - as above, gray green in parts
Trace sandstone

5190-5200 90% Limestone - light to medium brown, dark brown in part, buff to white in part, fine to medium crystalline, micro-crystalline and earthy in part, occasionally slightly argillaceous, firm; firm to hard, slightly micro-micaceous, some with biotite, minor orange and light brown chert fragments, some sandy, tight, no shows, cuts, fluorescence, odor
10% Shale - as above, influx of medium to dark brown, silty and micro-micaceous shale
Trace sandstone - as above

Fairly abundant pipe dope and LCM

5200-5210 90% Limestone - as above, predominantly earthy, fine to medium crystalline, crypto to microcrystalline in parts, trace chert
10% Shale - as above, predominantly medium to dark brown and marly, minor lavender

5210-5220 80% Limestone - as above
20% Shale - green gray, medium to dark brown, minor light to medium gray, blocky, occasionally subwaxy, some very silty occasionally marly, abundant red orange cavings

5220-5230	70%	<u>Limestone</u> - as above, abundant medium to dark gray brown, marly, occasionally fossiliferous, occasionally light to medium brown chert fragments, trace pyritic,
	30%	<u>Shale</u> - as above, green, gray, light to medium gray and medium to dark brown in parts, blocky, subwaxy, some sandy, firm, abundant red orange cavings
5230-5240	70%	<u>Limestone</u> - buff, white, light brown, occasional medium to dark brown, predominantly earthy, microcrystalline, some chalky and marly, minor very sandy chalky, tight, no shows, cuts, fluorescence, or odor
	30%	<u>Shale</u> - as above, becoming more medium to dark brown and marly
5240-5250	80%	<u>Limestone</u> - as above, abundant medium to dark brown, marly, microcrystalline
	20%	<u>Shale</u> - as above, predominantly medium to dark brown, marly
		Trace sandstone - clear, very fine to fine grained, predominantly siliceous, blue green clay cement, firm
5250-5260	80%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - as above
5260-5270	90%	<u>Limestone</u> - as above
	10%	<u>Shale</u> - as above
5270-5280	90%	<u>Limestone</u> - predominantly medium to dark gray brown, buff to light brown in parts, rare white, predominantly microcrystalline marly, grading to very calcareous shale, occasionally earthy, firm to very firm, micro micaceous in parts, tight, no shows, cuts, fluorescence; or odor
	10%	<u>Shale</u> - medium to dark gray brown, abundant red orange cavings, very calcareous and grading to very argillaceous limestone
5280-5290	100%	<u>Limestone</u> - as above, predominantly medium to dark gray-brown, marly, grading to very calcareous shale. Trace shale
5290-5300	100%	<u>Limestone</u> - as above, light gray, earthy and slightly silty in parts, minor buff to light brown pure limestone
5300-5310	100%	<u>Limestone</u> - as above, slightly more light gray, earthy as above
5310-5320	100%	<u>Limestone</u> - as above, occasional cryptocrystalline and dense in parts
5320-5330	100%	<u>Limestone</u> - as above, influx of abundant earthy to chalky limestone
5330-5340	100%	<u>Limestone</u> - predominantly medium to dark gray brown, light gray in parts, minor buff to white, predominantly very argillaceous, grading to a very calcareous shale, occasional cryptocrystalline, dense, some earthy, firm to hard, occasional dark brown cut, some slightly silty, slightly micro micaceous, tight, no shows, cuts, fluorescence, or odor

- 5340-5350 100% Limestone - as above, very dark brown to black, chert fragments
- 5350-5360 100% Limestone - as above
- 5360-5370 70% Limestone - as above, influx of abundant buff to white, earthy very dark brown cryptocrystalline, grading to marlstone in parts
30% Shale - medium to dark gray brown, occasional dark gray to black, blocky, calcareous to very calcareous, occasional grading to very argillaceous limestone, some carbonaceous
- 5370-5380 100% Limestone - predominantly white, buff to light brown, some medium to dark gray brown as above, predominantly fine crystalline, medium crystalline in parts, minor cryptocrystalline and earthy, some slightly sandy, trace bioclastic, moderately firm to occasionally hard, tight, no shows, cuts, fluorescence, odor
Trace shale - as above

TOP UPPER ISMAY

- 5380-5390 60% Limestone - as above, influx of abundant medium to dark gray brown and very argillaceous, grading to calcareous shale, more abundant sandy limestone than above, some grading to calcareous sandstone, tight, no shows, cuts, fluorescence, or odor
10% Sandstone - white, buff, very fine grained, rare fine grained, subrounded, calcareous cement, slightly cherty, friable, tight, no shows, cuts, fluorescence, or odor
30% Shale - as above
- 5390-5400 90% Limestone - as above, predominantly medium to dark gray brown, very argillaceous, light gray, silty in parts, no sandy limestone
10% Shale - medium to dark gray brown, blocky, slightly to very calcareous, grading to very argillaceous limestone, firm
- 5400-5410 80% Limestone - medium to dark gray brown, light gray, minor buff to white, predominantly very argillaceous, grading to calcareous shale, some silty as above, occasionally microcrystalline, firm to hard, tight, no shows, cuts, fluorescence, or odor
20% Shale - as above
- 5410-5420 70% Limestone - as above
30% Shale - as above, occasionally medium to dark gray and carbonaceous
- 5420-5430 70% Limestone - as above
30% Shale - as above, influx of minor green gray shale

Abundant cavings, poor sample

- 5430-5440 70% Limestone - as above, light brown, fine to medium crystalline, more abundant light gray, silty
30% Shale - as above

UPPER ISMAY 5440'

Abundant cavings; poor sample

5440-5450	80%	<u>Limestone</u> - predominantly buff to light gray, some medium to dark gray brown, minor white, predominantly earthy and argillaceous, some fine to medium crystalline and occasional coarse crystalline, tight, no shows, cuts, fluorescence, or odor
	20%	<u>Shale</u> - light gray, green gray, blocky, calcareous in parts, firm
5450-5460	70%	<u>Limestone</u> - as above
	30%	<u>Shale</u> - as above
5460-5470	60%	<u>Limestone</u> - light to medium gray brown, buff to white in parts minor medium to dark gray brown, crypto to microcrystalline, some earthy, some marly, occasionally dense, firm to hard, tight, no shows, cuts, fluorescence, or odor
	40%	<u>Shale</u> - as above, some marly
5470-5480	80%	<u>Limestone</u> - as above, minor buff to white
	20%	<u>Shale</u> - as above
5480-5490	80%	<u>Limestone</u> - as above, influx of abundant medium to dark gray brown, very argillaceous, grading to very calcareous shale
	20%	<u>Shale</u> - predominantly medium to dark gray brown, some green gray, very calcareous, grading to argillaceous limestone, firm
5490-5500	80%	<u>Limestone</u> - predominantly medium to dark gray brown as above, minor white, earthy, light brown, cryptocrystalline
	20%	<u>Shale</u> - as above
5500-5510	60%	<u>Limestone</u> - as above, some light gray, earthy
	40%	<u>Shale</u> - as above, occasionally light gray, green gray
5510-5520	70%	<u>Limestone</u> - as above, influx of light brown, occasionally buff, crypto to microcrystalline, dense, occasionally pyritic
	30%	<u>Shale</u> - as above
5520-5530	50%	<u>Limestone</u> - buff to light brown, medium brown in parts, occasionally medium to very dark brown, very argillaceous grading to calcareous shale, microcrystalline, some earthy, rare cryptocrystalline, firm, hard in parts, tight, no shows, cuts, fluorescence, or odor
	50%	<u>Shale</u> - dark to very dark gray brown, blocky, slightly to very calcareous, occasional grading to argillaceous limestone, moderately firm, some soft
5530-5540	90%	<u>Limestone</u> - as above, medium to dark gray brown, argillaceous as above, predominantly light brown, microcrystalline, occasionally earthy, moderately soft to firm
	10%	<u>Shale</u> - as above
5540-5550	90%	<u>Limestone</u> - as above, crypto to microcrystalline, dense, some buff to white, trace bioclastic, occasionally light brown chert fragments
	10%	<u>Shale</u> - as above, light green, gray in parts

- 5550-5560 90% Limestone - predominantly light brown, buff to light brown, microcrystalline, earthy, occasionally cryptocrystalline, moderately soft to firm, some hard, dense, tight, no shows, cuts, fluorescence, or odor
 10% Shale - dark gray brown to black, minor green gray, blocky slightly calcareous, firm
- 5560-5570 90% Limestone - as above, abundant light to dark brown chert fragments, predominantly cryptocrystalline, microcrystalline minor earthy, slightly dolomitic in parts
 10% Shale - as above, some very calcareous and grading to argillaceous limestone
- 5570-5580 80% Limestone - as above, light to medium brown in parts, occasional white, crypto to microcrystalline, abundant chert fragments, as above
 20% Shale - as above
- 5580-5590 80% Limestone - as above, light gray brown in parts, predominantly microcrystalline, earthy, minor cryptocrystalline, slightly argillaceous in parts, trace chert
 20% Shale - medium gray to black, gray brown in parts, blocky, slow fissile in part, firm, noncalcareous
- 5590-5600 90% Limestone - buff to light gray, light to medium brown, micro crystalline, earthy, silty in parts, occasionally very argillaceous, grading to calcareous shale, firm, moderately soft in parts, trace stylolitic, minor brown chert fragments, tight, no shows, cuts, fluorescence, or odor
 10% Shale - medium to dark gray, black, blocky, slightly to very calcareous, firm, trace coal
- 5600-5610 90% Shale - dark gray to black, occasionally medium gray, blocky, slightly to very calcareous, slightly to very silty, carbonaceous, occasional carbonaceous flakes, firm
 10% Limestone - as above
- 5610-5620 80% Shale - as above, becoming medium to very dark gray brown, occasional grading to very argillaceous limestone, minor green gray, dense shale
 20% Limestone - light to medium brown, buff to white, predominantly microcrystalline, some argillaceous, moderately soft to firm, tight, no shows, cuts, fluorescence, or odor
- TOP LOWER UPPER ISMAY (base 2nd shale)
- 5620-5630 60% Shale - as above, slightly more green gray than above
 40% Limestone - occasionally medium to dark brown and cryptocrystalline, some micro micaceous
- LOWER UPPER ISMAY 5624'
- 5630-5640 60% Shale - as above
 40% Limestone - as above, minor chert

5640-5650	70%	<u>Limestone</u> - buff to white, medium brown, mottled in part, earthy, fine to medium crystalline, minor microcrystalline, occasional slight dolomite, moderately soft to firm, some slightly argillaceous, occasionally slightly silty, trace black dead bitumen, trace chert, rare bioclasts, tight, no shows, cuts, fluorescence, or odor
	30%	<u>Shale</u> - as above, predominantly dark gray to black Trace anhydrite - white, chalky, crystalline, soft to moderately firm
5650-5660	80%	<u>Limestone</u> - as above, predominantly white, buff to light brown in parts, predominantly earthy and microcrystalline, moderately soft, occasionally firm, trace fractures
	20%	<u>Shale</u> - as above Trace anhydrite - as above, chalky
5660-5670	90%	<u>Limestone</u> - as above, becoming more light brown, fine to medium crystalline in parts, trace fracture with dark brown dead bitumen on face, occasionally bioclastic
	10%	<u>Shale</u> - as above
5670-5680	80%	<u>Dolomite</u> - buff to light brown, white, very fine to fine crystalline, subgranular, slightly limey in parts, occasionally slightly silty, fair to good intracrystalline, intragranular, porosity, some tight, minor dark brown dead bitumen infill porosity in parts, some cream to light brown cryptocrystalline, some earthy, moderately firm, some hard, occasionally crystalline anhydrite inclusions, no observable fluorescence, no cuts
	10%	<u>Limestone</u> - as above
	10%	<u>Shale</u> - as above Trace anhydrite - white, chalky, minor crystalline, soft

TOP LOWER ISMAY SHALE 5676'

5680-5690	50%	<u>Dolomite</u> - as above, slightly less porosity than above
	30%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - medium to dark gray brown, blocky, slightly to very calcareous, dense, slightly silty
5690-5700	80%	<u>Shale</u> - dark to very dark gray brown, blocky, firm, slightly to very calcareous, dense, slightly silty
	10%	<u>Dolomite</u> - as above
	10%	<u>Limestone</u> - as above
5700-5710	90%	<u>Shale</u> - as above, light to medium gray, mottled with chalky limestone in parts, which is grading to an argillaceous chalky limestone
	10%	<u>Dolomite</u> - as above Trace limestone - as above

5710-5720	100%	<u>Shale</u> - as above Trace dolomite - as above Trace limestone - as above
5720-5730	100%	<u>Shale</u> - as above, micromicaceous in parts
5730-5740	90%	<u>Shale</u> - as above
	10%	<u>Limestone</u> - as above
5740-5750	100%	<u>Shale</u> - as above Trace limestone - as above Trace dolomite - as above
5750-5760	100%	<u>Shale</u> - as above Trace limestone
5760-5770	100%	<u>Shale</u> - as above, rare coalcified and partially pyritic wood, micropyrictic in parts Trace limestone Trace dolomite
5770-5780	50%	<u>Shale</u> - as above
	50%	<u>Limestone</u> - light to medium brown, buff to white in parts, occasionally light gray, crypto to microcrystalline, occasionally chalky, abundant very silty limestone, grading to a calcareous siltstone, firm, some hard and dense, occasionally light brown and smoky chert fragments, tight no shows, cuts, fluorescence
5780-5790	60%	<u>Limestone</u> - as above, more white limestone than above, earthy, in parts, rare fine to medium crystalline, rare slightly dolomitic
	40%	<u>Shale</u> - as above, trace coal
5790-5800	80%	<u>Limestone</u> - white, buff to light brown, earthy to occasionally chalky, microcrystalline and fine crystalline in parts, moderately soft to firm, occasionally dark brown and black dead bitumen, trace dark brown chert fragments, tight, no shows, cuts, fluorescence
	20%	<u>Shale</u> - as above
5800-5810	90%	<u>Limestone</u> - as above, becoming more microcrystalline than above, rare cryptocrystalline
	10%	<u>Shale</u> - as above
"B" ZONE SHALE 5809'		
5810-5820	90%	<u>Limestone</u> - as above
	10%	<u>Shale</u> - as above
TOP "B" ZONE SHALE		
5820-5830	30%	<u>Shale</u> - dark gray to black, blocky, carbonaceous, slightly to very calcareous, moderately soft to firm, some micropyrictic
	70%	<u>Limestone</u> - as above, becoming predominantly light to medium gray brown, slightly argillaceous to argillaceous, earthy, fine to medium crystalline, microcrystalline in parts

5830-5840	60%	<u>Shale</u> - as above
	40%	<u>Limestone</u> - as above, white in parts
5840-5850	80%	<u>Shale</u> - as above
	20%	<u>Limestone</u> - as above
5850-5860	90%	<u>Shale</u> - as above
	10%	<u>Limestone</u> - as above
5860-5870	90%	<u>Shale</u> - as above
	10%	<u>Limestone</u> - as above
DESERT CREEK	5870'	
5870-5880	90%	<u>Shale</u> - as above slightly micromicaceous in parts, rare fracture infill with calcite
	10%	<u>Limestone</u> - as above, trace light gray brown, argillaceous and silty limestone
TOP DESERT CREEK		
5880-5890	70%	<u>Limestone</u> - light gray to light gray brown, buff in parts, predominantly earthy and silty, some chalky, slightly dolomitic in parts, slightly to occasionally very argillaceous, soft to moderately firm, occasional light to medium brown chert fragments, no visible porosity, no shows, cuts, fluorescence
	30%	<u>Shale</u> - as above
		Trace anhydrite
5890-5900	10%	<u>Anhydrite</u> - white, chalky, fine crystalline, soft to moderately firm, slightly calcareous in parts, interbedded with limestone
	80%	<u>Limestone</u> - as above, becoming light to medium gray brown, occasionally microcrystalline in parts
	10%	<u>Shale</u> - dark gray to black, blocky, carbonaceous, slightly to very calcareous, moderately soft to firm, silty
5900-5910	20%	<u>Anhydrite</u> - as above, gummy
	30%	<u>Shale</u> - as above, light green gray in parts (cavings?)
	50%	<u>Limestone</u> - as above
		Trace sandstone - white, buff, fine to medium grained, siliceous calcareous cement, firm (cavings?)
5910-5970	40%	<u>Shale</u> - dark gray to black, dark gray brown, minor green gray, carbonaceous, calcareous to very calcareous, grading to a very argillaceous limestone, firm, some silty
	60%	<u>Limestone</u> - as above, abundant light to medium brown chert fragments
		Trace anhydrite
		Trace sandstone
Began core #1	5913-5957'	cut 44' · rec 39½'
LOWER BENCH	5921'	
DESERT CREEK POROSITY	5929'	

5970-5980 80% Shale - dark gray to black, gray brown in parts, blocky, carbonaceous, moderately firm, very calcareous, slightly silty, slightly micro micaceous
 20% Dolomite - buff to light brown, microcrystalline, firm to hard, dense, some limey, occasional chert fragments, tight, no shows, cuts, fluorescence, or odor

AKAH 5873'

5980-5990 80% Shale - as above, medium gray in parts
 10% Dolomite - as above
 10% Limestone - buff to light brown, microcrystalline, earthy, moderately soft to firm, tight, no shows, cuts, fluorescence, odor
 Trace anhydrite

5990-6000 90% Shale - as above
 10% Limestone - as above
 Trace dolomite

Shaker motor burned out

6000-6010 No sample

SALT 6009'

6010-6012 No sample

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well ☐ gas well ☐ other ☐
2. NAME OF OPERATOR
Wexpro Company
3. ADDRESS OF OPERATOR
P. O. Box 1129, Rock Springs, WY 82901
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: NE NW 699' FNL, 1998' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) Supplementary History			<input checked="" type="checkbox"/>

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD 6012', PBD 5948', waiting to test.

Rigged up work over rig, landed 2-7/8" tubing at 5847.53' KBM, perforated with 2 holes per foot from 5940' to 5946'; in 20 minutes pressure was 1050 psi, flowed to pit for 2-1/2 hours, shut well in, released rig.

5. LEASE
U - 23161
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
-
7. UNIT AGREEMENT NAME
-
8. FARM OR LEASE NAME
Bug
9. WELL NO.
13
10. FIELD OR WILDCAT NAME
Bug
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
17-36S-26E.
12. COUNTY OR PARISH
San Juan
13. STATE
Utah
14. API NO.
43-037-30610
15. ELEVATIONS (SHOW DF, KDB, AND WD)
KB 6255.20' GR 6241'

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Lee Martin TITLE Asst Drlg Supt DATE Jan. 13, 1982

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

January 15, 1982

Wexpro Company
P. O. Box 1129
Rock Springs, Wyoming 82901

Re: See attached

Gentlemen:

Our records indicate that you have not filed the monthly drilling reports for the months indicated above on the subject wells.

Rule C-22, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. This report may be filed on Form OGC-1B, (U. S. Geological Survey Form 9-331) "Sundry Notices and Reports on Wells", or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very truly yours.

DIVISION OF OIL, GAS AND MINING

Cari Furse
Clerk Typist

Well No. Whitmore #1
Sec. 17, T. 12S, R. 11E
Carbon County, Utah
(November 1981- December 1981)

Well No. Bug #13
Sec. 17, T. 36S, R. 26E.
San Juan County, Utah
(November 1981- December 1981)

Well No. Whitmore #2
Sec. 21, T. 12S, R. 10E
Carbon County, Utah
(All monthly's since spud date)

11-1-79?

** Please call in your spuds!

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input type="checkbox"/>	Other _____			
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	Other _____	
2. NAME OF OPERATOR Wexpro Company								
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming								
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface NE NW 699' FNL, 1998' FWL At top prod. interval reported below At total depth NE NW								
14. PERMIT NO. API #: 43-037-30610				12. COUNTY OR PARISH San Juan				13. STATE Utah
15. DATE SPUDDED 9-19-81	16. DATE T.D. REACHED 10-5-81	17. DATE COMPL. (Ready to prod.) 1-21-82	18. ELEVATION OF, REB, BT, GR, ETC.* KB 6255.20 GR 6241	19. ELEV. CASINGHEAD -		25. WAS DIRECTIONAL SURVEY MADE No		
20. TOTAL DEPTH, MD & TVD 6012	21. PLUG, BACK T.D., MD & TVD 5963	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY 0 - 6012	ROTARY TOOLS -		CABLE TOOLS -		
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5940 - 5946' Desert Creek						27. WAS WELL CORED Yes		
26. TYPE ELECTRIC AND OTHER LOGS RUN DIL, CNL/FDC								
28. CASING RECORD (Report all strings set in well)								
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED		
9-5/8	36	1,652.75	12-1/4	860		0		
5-1/2	17	6,005.85	8-3/4	350		0		
29. LINER RECORD								
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD			
					SIZE	DEPTH SET (MD)	PACKER SET (MD)	
					2-7/8	5,847.53		
31. PERFORATION RECORD (Interval, size and number) 5940-5946', jet, 2 holes per foot				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.				
				DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED		
33.* PRODUCTION								
DATE FIRST PRODUCTION 1-19-82		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing				WELL STATUS (Producing or shut-in) Shut in		
DATE OF TEST 1/19-21/82	HOURS TESTED 48	CHOKE SIZE 16/64	PROD'N. FOR TEST PERIOD →	OIL—BBL. 183	GAS—MCF. 1474	WATER—BBL. -	GAS-OIL RATIO 8055:1	
FLOW. TUBING PRESS. 1710	CASING PRESSURE 1860	CALCULATED 24-HOUR RATE →	OIL—BBL. 183	GAS—MCF. 1474	WATER—BBL. -	OIL GRAVITY-API (CORR.)		
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented while testing						TEST WITNESSED BY		
35. LIST OF ATTACHMENTS Logs as above								
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records								
SIGNED <u>Thomas A. Smith</u>		TITLE <u>Director, Petroleum Engrg</u>				DATE <u>Jan. 22, 1982</u>		

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	DEPTH	TOP	TRUE VERT. DEPTH
				Log tops:			
				Morrison	0'		
				Paradox	4,982		
				Lower Upper			
				Ismay	5,624		
				Lower Ismay Shale	5,679		
				B Zone	5,813		
				Desert Creek	5,871		
				Lower Bench			
				Desert Creek	5,921		
				Desert Creek			
				Porosity	5,929		
				Salt	6,009'		

COMPLETION REPORT

Well: Bug #13 Date: August 12, 1982

Area: Bug Field Lease No: U-23161

☐ New Field Wildcat ☒ Development Well ☐ Shallower Pool Test
☐ New Pool Wildcat ☐ Extension ☐ Deeper Pool Test

Location: 699 feet from North line, 1998 feet from West line, NE 1/4 NW 1/4
Section 17, Township 36 South, Range 26 East
County: San Juan State: Utah

Operator: Wexpro Company

Elevation: KB 6255.2' GR 6241' Total Depth: Driller 6012' Log 6012'

Drilling Commenced: September 19, 1981 Drilling Completed: October 5, 1981

Rig Released: October 7, 1981 Well Completed: January 21, 1982

Sample Tops: (unadjusted)

Paradox	4982'
Lower Ismay Shale	5674'
"B" Zone	5809'
Desert Creek	5870'
Lower Bench D.C.	5921'
Desert Creek Poro	5929'
Salt	6009'

Log Tops:

Morrison	Surface
Cutler	2180'
Honaker Trail	4306'
Paradox	4965'
Lower Upper Ismay	5624'
"B" Zone	5813'
Desert Creek	5871'
Lower Bench Desert Creek	5921'
Desert Creek Porosity	5929'
Akah	5973'
Salt	6009'

Sample Cuttings: 10' samples (3800-6012')

1 dry cut to SLC - 1 wet cut to Amstrat/Denver

Status: SI Oil Well

Producing Formation: Desert Creek

Perforations: 5940-5946'

Stimulation: None

Production: 183 BOPD 1474 MCFGPD

Plug Back Depth: 5963'

Plugs: n/a

Hole Size: 12-1/4" Surface to 1680'
8-3/4" 1680-6012'

Casing/Tubing: 9-5/8", 36# @ 1652.75' 2-3/8" tbg @ 5847'
5-1/2", 17# @ 6005.85'

Logging - Mud: Smith Mud Logging 3800-6012'

Mechanical: Schlumberger - DIL, FDC/CNL, HDT

Contractor: Arapahoe Drilling Company Rig #4

Completion Report Prepared by: R. W. Fallon

Remarks: API #43-037-30610
Location was re-surveyed by company survey party, elevation correction of -19'.
New GR is 6241', old GR was 6260'.

RECEIVED

AUG 17 1982

DIVISION OF
OIL, GAS & MINING

COMPLETION REPORT (cont.)

Page 2

Well: Bug #13

Area: Bug Field

Cored Intervals (recovery):

Core #1: 5913-5952', analysed by Core Lab

Tabulation of Drill Stem Tests:

<u>No.</u>	<u>Interval</u>	<u>IHP</u>	<u>IFP (min.)</u>	<u>ISIP (min.)</u>	<u>FFP (min.)</u>	<u>FSIP (min.)</u>	<u>FHP</u>	<u>Samples Caught</u>	<u>Remarks</u>
1	5071-5143'	2289	87-97 (30)	1932 (90)	72-263 (90) 148-161 (90)	1932 (230) 1907 (180)	2264	Gas, mud	GTS, 138 MCFD maximum, rec 270' GCM 3 flow periods run

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTSUBMIT IN TRIPLICATE
(Other instructions
reverse side)Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U-23161

191222

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Wexpro Company

3. ADDRESS OF OPERATOR

P. O. Box 458, Rock Springs, Wyoming

4. LOCATION OF WELL (Report location clearly and in accordance with State Act of 1907.
See also space 17 below.)
At surface

DIVISION OF

OIL, GAS & MINING

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Bug

8. WELL NO.

13

10. FIELD AND POOL, OR WILDCAT

Bug Field

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

17-36S-26E

12. COUNTY OR PARISH 13. STATE

San Juan

Utah

14. PERMIT NO.

43-037-30610

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

KB 6255.20'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

Install Facilities.

X

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The above captioned well has been shut-in since January, 1982 to conserve gas cap integrity of the Bug Field. With the Bug Field beginning to deplete, the well needs to be produced when facilities are installed. The well was drilled on the same lease as Bug Well No. 15 and Bug Well No. 16, and off lease measurement was approved in 1981 for wells producing to "B" Battery. A facility diagram is attached. Gas will be metered in compliance with CDM Standards. Oil will be metered by a positive displacement meter (barrel counter) and will be commingled in the tanks approved for Bug Well No. 16's production. Tank production will be allocated to Bug Well No. 13 based on metering. Bug Well No. 16's production will be the total tank gauge less the metered volume from Bug Well No. 13 (assuming Bug Well No. 15 will also be produced, then Bug Well No. 16's production volume will be the total tank volume less the metered volume from Bug Well No. 13 and less the monthly average test volume from Bug Well No. 15). Bug Wells No. 13, 15 and 16 are drilled on the same lease, have identical working interest and identical royalty interest value.

Should there be any questions concerning this matter, please advise. Your expeditious approval of this matter will be appreciated so that construction work can be initiated in dry weather.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE

DATE

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

Federal approval of this action
is required before commencing
operations.

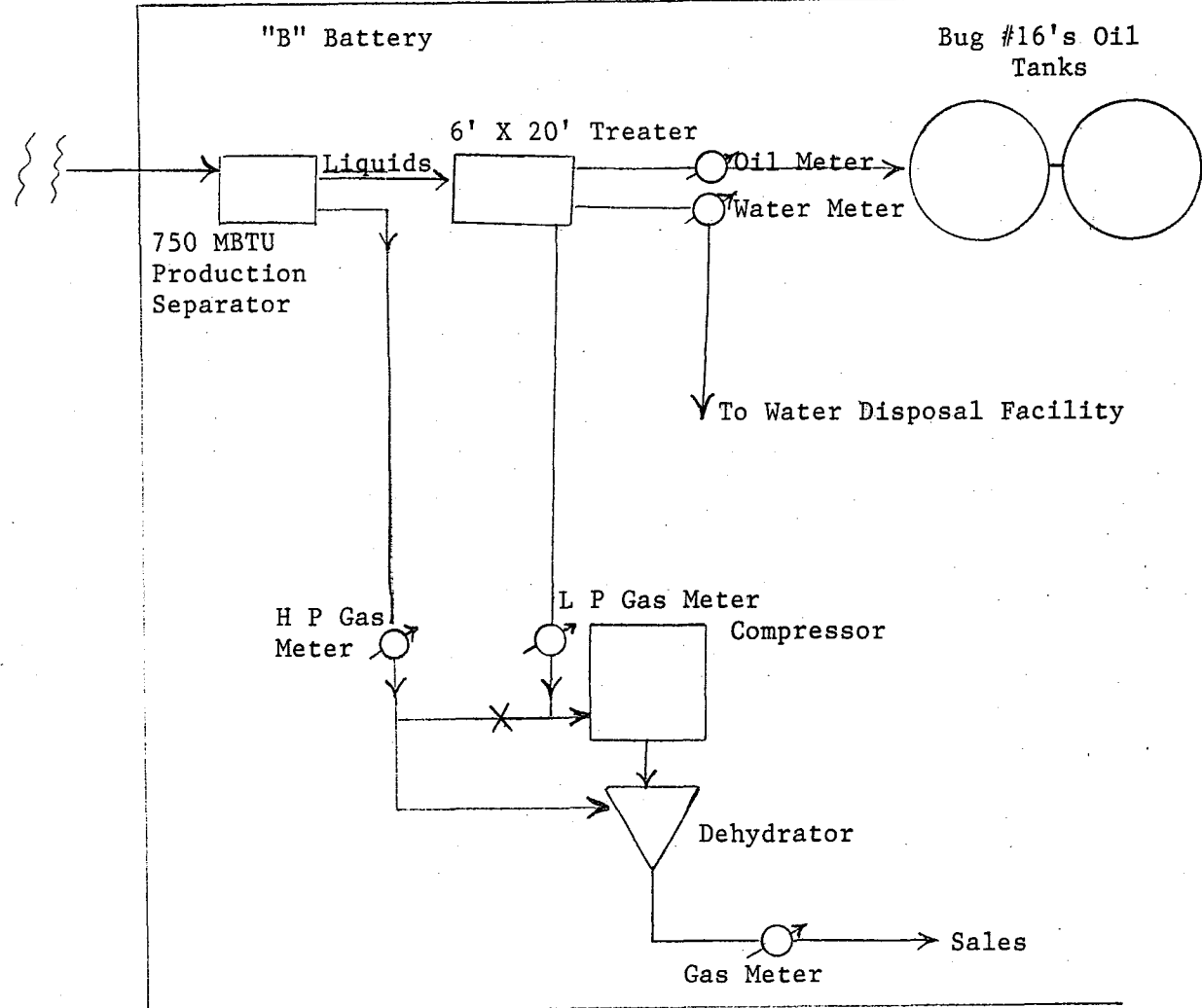
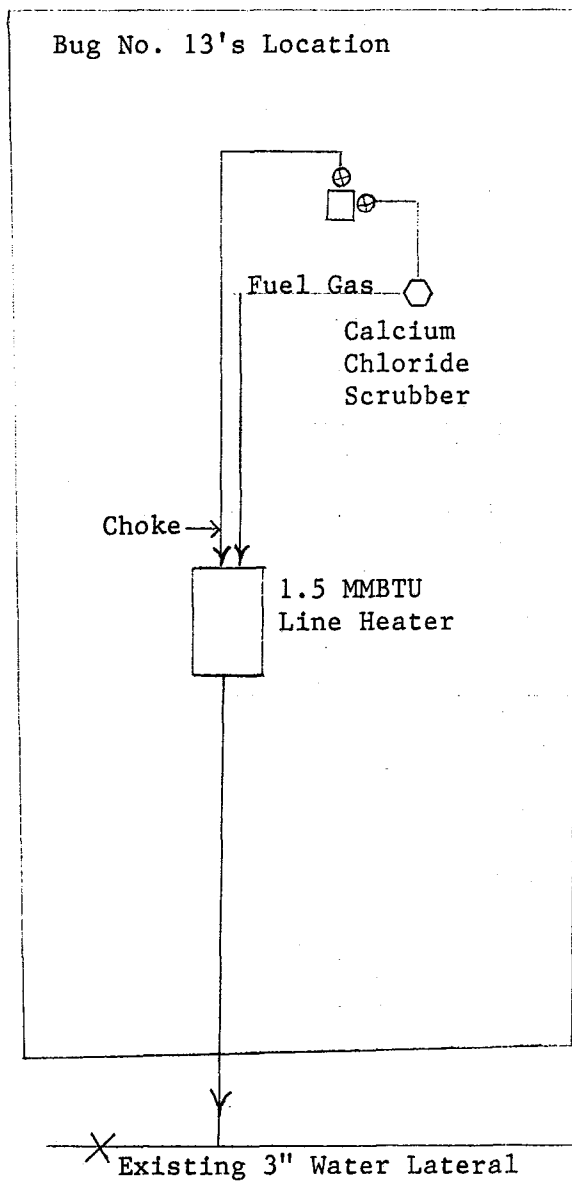
*See Instructions on Reverse Side

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE 12-10-86

BY John R. Day

Bug Well No. 13
Production Facilities



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Wexpro Company

3. ADDRESS OF OPERATOR P. O. Box 458

Rock Springs, Wyoming 82902

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

NW NW

14. PERMIT NO.

43-037-30610

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

Undesirable Event

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

On December 20, 1987 at approximately 1:00 pm, the Bug Field operator discovered a corrosion leak in the bottom of Tank No. 651, a 1000-barrel oil storage tank, located at Bug Battery B. Approximately 115 barrels of fluid is totally contained within the tank firewall. It is estimated that 95 barrels is oil and the remainder is brine.

Crews are presently in the process of sucking out the oil via vacuum truck. The oil will be put into the power oil storage tank, hot oiled and shipped.

Clean up operations will be completed by the afternoon of December 23, 1987. The tank will be repaired.

Notification was given to the landowner, Clyde Sanchez, and to Robert Turri of the Bureau of Land Management on December 21, 1987.

The spill will be reported on the Monthly Report of Operations and the loss will be prorated back to Bug Well No. 13, NE NW 17-36S-26E, Lease No. U-2 31 61, and Bug Well No. 15, NE NE 17-36S-26E, Lease No. U-23161.

43-037-30610 SOW-DSCR

18. I hereby certify that the foregoing is true and correct

SIGNED A.R. Logan by Brent P. Marchant TITLE District Manager

DATE December 21, 1987

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on
reverse side)

Form approved:
Budget Bureau No. 1004-1
Expire August 31, 1987
5. LEASE DESIGNATION AND SERIAL

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL ☒ GAS ☐ OTHER ☐
WELL WELL

2. NAME OF OPERATOR

Wexpro Company

3. ADDRESS OF OPERATOR

P. O. Box 458, Rock Springs, Wyoming 82902

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*

See also space 1.7 below.)
At surface

NE NW

14. PERMIT NO

43-037-30610

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

KB 6255.20'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other) Venting

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

(NOTE: Report results of multiple completion on Well
Completion or Reconpletion Report and Log form.)

SUBSEQUENT REPORT OF:

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On April 13, 1989 Bug Battery B Compressor will be shut in for routine maintenance. It is anticipated the minor overhaul will be completed in two - three working days. While the compressor is down approximately 350 MCF/D will be vented to the atmosphere. The vented gas is produced from Bug Wells No. 4, 14 and 13. The volume of flared gas will be reported on the Monthly Report of Operations as required.

This procedure was approved by Mr. Bill Stringer of the BLM on April 12, 1989.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE

District Manager

DATE April 13, 1989

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-1135
Expires September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reenter to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.

SUBMIT IN TRIPLICATE

OCT 03 1990

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Wexpro Company

3. Address and Telephone No.
P. O. Box 458, Rock Springs, Wyoming 307-382-9791

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
699' FNL, 1998' FWL, NE NW 17-36S-26E

5. Lease Designation and Serial No.

U-23161

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Bug Well No. 13

9. API Well No.

43-037-30610 POW

10. Field and Pool, or Exploratory Area

Bug

11. County or Parish, State

San Juan, Utah

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection

Flare Gas

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

On October 2, 1990, Bug Battery B Compressor was shut-in for emergency overhaul. It is anticipated that the overhaul will be completed in seven days. While the compressor is down, approximately 214 MCFPD will be vented to the atmosphere. The vented gas is produced from Bug Wells No. 4, 13, 14, 15 and 16. The volume of flared gas will be reported on the Monthly Report of Operations.

This procedure was approved by Eric Jones of the Moab District Office.

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 10/15/90

BY: [Signature]

OIL AND GAS	
DFN	RJF
JRB	GLH
DIS	SLS
2 SBH	
4 Dme	
45 MICROFILM	
86 FILE	

14. I hereby certify that the foregoing is true and correct

Signed

Title

District Manager

Date 10/02/90

(This space for Federal or State office use)

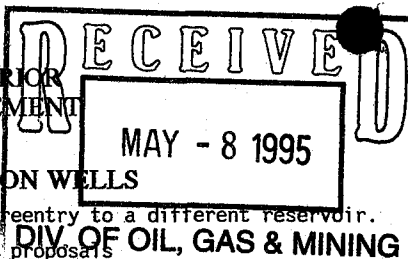
Approved by

Title

Date

Conditions of approval, if any:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT -" for such proposals

5. LEASE DESIGNATION AND SERIAL NO.

U-23161

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. IF UNIT OR CA, AGREEMENT DESIGNATION

8. WELL NAME AND NO.

BUG WELL NO. 13

9. API WELL NO.

43-037-30610

10. FIELD AND POOL, OR EXPLORATORY AREA

BUG

11. COUNTY OR PARISH, STATE

SAN JUAN, UTAH

SUBMIT IN TRIPLICATE

1. TYPE OF WELL

OIL

GAS

☒ WELL ☐ WELL ☐ OTHER

2. NAME OF OPERATOR

WEXPRO COMPANY

3. ADDRESS AND TELEPHONE NO.

P. O. BOX 458, ROCK SPRINGS, WY 82902 (307) 382-9791

4. LOCATION OF WELL (FOOTAGE, SEC., T., R., M., OR SURVEY DESCRIPTION)

NE NW, 699' FNL, 1998' FWL
17-36S-26E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other

☐ Change in Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On May 2, 1995, we made the following transfers from the production pit at Bug Well No. 13:

Approximately 30 barrels fresh water moved to Tank No. 793 at Bug Battery "B".

Approximately 3 barrels of BS&W and contaminated oil to Tank No. 646 serving Bug Well No. 4, but containing currently 936 barrels of unmarketable crude oil.

The fluids contained in the pit were a result of rain/run off and unloading the well to the pit; not from any undesirable event, therefore, an NTL-3A report is not required.

14. I hereby certify that the foregoing is true and correct

Signed

Title

Operations Manager

Date

05/03/95

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

Title 18 U.S. C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Bug Field</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: Multiple
2. NAME OF OPERATOR: Wexpro Company <u>N 1070</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: PO Box 45601 CITY <u>Salt Lake City</u> STATE <u>UT</u> ZIP <u>84145</u>		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE:		8. WELL NAME and NUMBER: Bug Field (Multiple Wells)
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <u>36S 26E</u>		9. API NUMBER: Multiple
COUNTY:		10. FIELD AND POOL, OR WILDCAT: Desert Creek / Ismay
STATE: <u>UTAH</u>		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Per conversation w/ Earlene Russell. Effective 08/01/2005, Synergy Operating, LLC (N2795) has taken over the operator responsibility of the following wells.

Bug # 4 (43-037-30542) - State of Utah Lease ML-27026
Bug # 8 (43-037-30589) - BLM Lease U-43653
Bug # 13 (43-037-30610) - BLM Lease U-23161
Bug # 14 (43-037-30605) - BLM Lease U-23161
Bug # 15 (43-037-30606) - BLM Lease U-23161
Bug # 16 (43-037-30607) - BLM Lease U-23161
Bug # 17 (43-037-30793) - State of Utah Lease ML-27026
Bug # 12 (SWD) - (43-037-30595) - Fee Lease
Bug "B" Battery
Bug "C" Battery
Bug Compressor

no impact at DOGM (Erussell)

A copy of this document will also be submitted to the State of Utah directly from Synergy Operating, LLC's office.

NAME (PLEASE PRINT) James R. Livsey TITLE Vice President
SIGNATURE James R. Livsey DATE February 6, 2006

(This space for State use only)

APPROVED 2128106

Earlene Russell

Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

RECEIVED

FEB 10 2006

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Bug Field</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: <u>Multiple</u>
2. NAME OF OPERATOR: <u>Synergy Operating, LLC</u> <u>N2795</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: <u>PO Box 5513</u> CITY <u>Farmington</u> STATE <u>NM</u> ZIP <u>87499</u>		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE:		8. WELL NAME and NUMBER: <u>Bug Field (Multiple Wells)</u>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <u>36S 26E</u>		9. API NUMBER: <u>Multiple</u>
COUNTY:		10. FIELD AND POOL, OR WILDCAT: <u>Desert Creek / Ismay</u>
STATE: <u>UTAH</u>		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Per conversation w/ Earlene Russell. Effective 08/01/2005, Synergy Operating, LLC (N2795) has taken over the operator responsibility of the following wells.

Bug # 4 (43-037-30542) - State of Utah Lease ML-27026
Bug # 8 (43-037-30589) - BLM Lease U-43653
Bug # 13 (43-037-30610) - BLM Lease U-23161
Bug # 14 (43-037-30605) - BLM Lease U-23161
Bug # 15 (43-037-30606) - BLM Lease U-23161
Bug # 16 (43-037-30607) - BLM Lease U-23161
Bug # 17 (43-037-30793) - State of Utah Lease ML-27026
Bug # 12 (SWD) - (43-037-30595) - Fee Lease
Bug "B" Battery
Bug "C" Battery
Bug Compressor

BLM UT-924

no impact at DOGM (Earlene Russell)

A copy of this document will also be submitted to the State of Utah directly from Wexpro/QEP's office.

NAME (PLEASE PRINT) <u>Thomas E. Mullins</u>	TITLE <u>Engineering Manager</u>
SIGNATURE <u>[Signature]</u>	DATE <u>1-31-2006</u>

(This space for State use only)

APPROVED 2/28/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

RECEIVED

FEB 10 2006

DIV. OF OIL, GAS & MINING

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM not yet BIA n/a

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, Transfer of Authority to Inject, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 2/15/2006

DATA ENTRY:

1. Changes entered in the Oil and Gas Database on: 2/28/2006
2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 2/28/2006
3. Bond information entered in RBDMS on: 2/28/2006
4. Fee/State wells attached to bond in RBDMS on: 2/28/2006
5. Injection Projects to new operator in RBDMS on: n/a
6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: UT0924

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: n/a

FEE & STATE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The NEW operator of any fee well(s) listed covered by Bond Number BOK06SDP01525
2. The FORMER operator has requested a release of liability from their bond on: **
The Division sent response by letter on: **Joint bond with QEP, & QEP Uinta Basin

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The FORMER operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS: